

# Manufacturers Record

## Exponent of America



Single Copy, 20 Cents.  
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Baltimore, Md.  
JANUARY 19, 1928

## Let the Nation Do Some Empire Building.

Every well-managed and well-financed corporation that owns vast stores of coal or iron ore, worthless except as they are developed, necessarily uses business judgment in creating the plants that mine the coal or that utilize the iron ore in the ground, for the production of iron or steel or both. The corporation which failed to turn its undeveloped resources into actual wealth would be regarded by all intelligent people as a victim of extremely bad management.

This nation owns vast resources of raw materials. It owns rivers and harbors, the development of which would mean great increase in wealth and the broadening of the prosperity of all its people. To refuse to utilize this latent wealth, or these wealth potentialities, is unwise in the extreme. A narrow policy of expenditure may be, and often is, the poorest form of economy.

The development to the fullest extent of our waterways, the safeguarding of our navigable rivers from overflow, the deepening of our harbors and the improvement of inland waterway transportation—all this opens to the country opportunities for almost illimitable wealth creation. It is an old axiom, well understood by political economists, that often the best way to create wealth and to pay off national indebtedness is by empire building activities. It is fully recognized that the overflow of the Mississippi River and its tributaries has cost this country in the aggregate hundreds of millions of dollars. The fear of these overflows retards the upbuilding of industries and of cities, and the fullest utilization of the rich land along their courses. The actual overflow produces enormous losses. Not to use our wealth to change this situation, to protect the lands along these rivers, to utilize them for water transportation and for the development of hydro-electric power, would indicate that our Government is not managed by broad statesmen—men of such empire building activities as Cecil Rhodes, James J. Hill, Henry M. Flagler and other great developers who enriched vast regions and even continents by their daring and successful efforts to spend money freely to accomplish great results.

We shall need another canal connecting the Atlantic and the Pacific. The Nicaragua opportunity is open to us. Why not plan the new route now before the pressing need of an overcrowded Panama Canal brings on congestion of traffic?

We need to develop to the utmost coastal canals from New England to the far South. Some work is being done in sections along that whole stretch of coast, but there is a vast amount that could be done more rapidly and to great advantage to the profit of the whole country.

We need a direct outlet from the Lakes down the Mississippi to New Orleans. We need an outlet from the Lakes through the St. Lawrence. But why attempt to catalogue the many things which could be done? All of these things would add enormously to the prosperity of the country, safeguarding our future in many respects and so increasing national wealth that the payment of our bonded indebtedness in the coming years would be of trifling importance, so vast would be the gain in wealth.

Let us as a nation learn to think in terms of empire building, and carry forward on a broad scale everything which would add to the employment of people and to the progress and prosperity of every section of the country.

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RICHARD H. EDMONDS, *Editor*

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# Manufacturers Record

EXONENT OF AMERICA

Devoted to the Upbuilding of the Nation Through the Development  
of the South and Southwest as the Nation's Greatest Material Asset

Trade-Name Registered in the U. S. Patent Office

Vol. XCIII No. 3 }  
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BALTIMORE, JANUARY 19, 1928.

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## The South to the Forefront in Record Power Production by Public Utilities in 1927.

ALL records were broken in the consumption of electric power produced by public utilities in the United States last year. In the South, alone, there was a gain of over 13 per cent compared with 1926 and a third more than the 1925 electric power production by Southern public utility companies. Power facilities in the Southern States are being rapidly increased to keep pace with the manufacturing growth.

With an estimated output of 79,350,000,000 kilowatt-hours in 1927, public utility companies in the United States showed a gain of over 6 per cent, compared with the 73,791,000,000 kilowatt-hours produced in 1926, and 1926 was 20 per cent ahead of the 65,870,000,000 kilowatt-hour output of 1925. The country's estimated hydro-electric production last year was 29,290,000,000 kilowatt-hours, compared with 26,188,000,000 kilowatt-hours in 1926 and 22,322,000,000 kilowatt-hours in 1925. This estimate for 1927 has been compiled by the MANUFACTURERS RECORD and is based on the preliminary figures issued in the monthly reports of the Division of Power Resources of the Geological Survey for the 11 months ending November.

During the past year there was great expansion by public utility companies in constructing steam and hydro-electric plants, especially in the Southern States, which section in 1926 showed a greater increase in installed capacity than any other part of the United States.

For the year just closed public utility companies operating in the South had an estimated electric power production of 15,899,000,000 kilowatt-hours, or an increase of 15 per cent in electric consumption from this source, compared with 13,679,000,000 kilowatt-hours in 1926 and a gain of 34 per cent, compared with 11,847,000,000 kilowatt-hours produced in 1925. Based on these

reports, the Southern hydro-electric power output was 4,864,000,000 kilowatt-hours, as compared with 4,135,000,000 kilowatt-hours, or nearly 18 per cent over 1926, and 2,770,000,000 kilowatt-hours, or 70 per cent, in excess of the 1925 production. Even for the 11 months ending November, public utility power production in the South was much larger than the output of the entire 12 months of 1926. This tremendous gain in power consumption in the South not only shows the growth of Southern public utilities, but also indicates the expansion of Southern industry generally, which is increasing its power consumptive demands at a rapid rate. It offers a yardstick for the measure of industrial development and in this respect reflects the greater activity experienced by Southern industry in 1927 as compared with former years. New plants and plant enlargements have required additional power, and public utilities by the building of steam and hydro-electric generating stations are endeavoring to supply the growing power needs of the South.

Throughout this section there were some outstanding developments in the electric power field in 1927; a survey of these was given in the special construction summary in the

MANUFACTURERS RECORD last week. New plants were put into operation and many large-scale developments begun which, before many months, will further swell the productive capacities of Southern public utilities.

As outlined in the 1927 edition of the Blue Book of Southern Progress, nearly one-half of the country's increase in installed hydro-electric power in 1926 was in the Southern States. On January 1, 1927, the South had an installed water-power capacity of 2,760,000 horsepower, of which 2,513,000 horsepower represented the capacity of Southern public utility companies. More than 23 per cent of the nation's devel-

ELECTRIC-POWER PRODUCTION OF SOUTHERN PUBLIC UTILITIES, BY STATES.

States	1926		1927*	
	Total	By water power	Total	By water power
Alabama . . .	1,582,717,000	1,304,093,000	1,907,000,000	1,546,000,000
Arkansas . . .	163,697,000	33,035,000	167,000,000	49,500,000
Dist. of Col. . .	381,373,000	.....	410,000,000	.....
Florida . . .	509,670,000	18,219,000	575,000,000	10,200,000
Georgia . . .	710,578,000	613,548,000	677,000,000	580,000,000
Kentucky . . .	513,800,000	64,357,000	563,000,000	116,000,000
Louisiana . . .	519,793,000	.....	631,000,000	.....
Maryland . . .	587,989,000	36,139,000	592,000,000	26,700,000
Mississippi . . .	58,667,000	.....	45,000,000	.....
Missouri . . .	912,503,000	74,365,000	944,000,000	82,500,000
N. Carolina . . .	1,117,378,000	412,670,000	1,785,000,000	761,000,000
Oklahoma . . .	463,128,000	5,638,000	672,000,000	5,200,000
S. Carolina . . .	1,038,198,000	681,952,000	1,080,000,000	664,500,000
Tennessee . . .	894,015,000	557,229,000	928,000,000	550,000,000
Texas . . .	1,492,902,000	10,203,000	1,837,000,000	11,200,000
Virginia . . .	925,882,000	206,283,000	1,048,000,000	260,200,000
W. Virginia . . .	1,807,360,000	118,061,000	2,038,000,000	200,400,000
Total . . .	13,679,650,000	4,135,792,000	15,899,000,000	4,864,200,000
United States . . .	73,791,064,000	26,188,801,000	79,350,000,000	29,290,500,000

\*Estimated by MANUFACTURERS RECORD from 11-month total production based on preliminary monthly reports of the Division of Power Resources of the Geological Survey.

oped water-power is in the South. The construction of steam-electric generating plants was also carried forward on a large scale and many new projects are under way and planned. As rapid as Southern industry is growing it is evident that this development will not be hampered by a lack of adequate power in the light of progress made toward supplying present and future needs.

In outlining some of the accomplishments of the public utility industry in the United States, Pynchon & Co., New York, point out that gross earnings exceed \$5,000,000,000 and that many new records were established in 1927. About 35 per cent of this enormous total was derived from the electric power and light industry. In spite of a gradual reduction in consumer rates, gross revenues for this class of service increased from \$1,569,000,000 in 1926 to between \$1,750,000,000 and \$1,783,000,000 in 1927.

The steady expansion of the electric power and light industry in five years is shown in the following:

	1927	1926	1925	1924	1923
Capacity, K.V.A. ....	29,610,000	26,812,000	24,344,000	22,000,000	19,900,000
Production, K.W.H. ....	79,350,000,000	73,793,000,000	65,870,000,000	59,014,000,000	55,674,000,000
Total customers ....	21,650,000	19,500,000	17,937,200	16,566,604	14,384,727
Customer ownership stockholders....	1,600,000	1,321,944	1,091,000	855,901	561,434
Gross revenue ....	\$1,750,000,000	\$1,569,000,000	\$1,481,600,000	\$1,354,570,000	\$1,269,550,000

### ARKANSAS PEOPLE HEAD GREAT ENTERPRISES IN NEW YORK.

THE New York Sun recently published a remarkable article "on the imposing number of Arkansas people, and particularly from Little Rock, who are holding high positions in the city of New York." It states that the recent election of Charles Simonton McCain to the presidency of the National Park Bank "led to the discovery of the amazing contribution that Arkansas has made to the business life of New York." More than 200 young to middle aged men and a few women came from Little Rock to New York to fight for and gain the capital prizes in banking and mercantile enterprises, according to the story in the Sun, which says it is probable that no other community in the country can match this record of Arkansas. The Sun gives a long list of men of prominence standing at the head of great mercantile businesses and financial enterprises, who have come up to New York from Arkansas.

This is but a single illustration of what the MANUFACTURERS RECORD has been proclaiming for so, these many years, viz.: that there is an inherent force and strength in Southern men which makes for pre-eminent success wherever and whenever the opportunity is offered. But what a tremendous loss to Arkansas has been this migration of so many of its superb business leaders; the loss has been incredible in extent to that State while it has been of incredible value to New York. Yet the same thing has been going on in every part of America.

The South has been educating its people, then sending them out by the thousands and the hundred thousands to help develop other sections. A statement we have often made is that between 1865 and 1900 not less than 5,000,000 Southern-born whites migrated from the Central South or from that part from Virginia to Louisiana, about 3,500,000 going into the North and West and the others going into Texas and Oklahoma. That was the greatest drain any country of modern times has ever had to endure, a greater loss than the terrific losses of the Civil War, from the Reconstruction period between 1867 and 1876.

The typical illustration the New York Sun has given of the pre-eminent positions held in that city by many Arkansas men is suggestive of the power and initiative and driving

In regard to the prospective increase in the use of electricity, Pynchon & Co. suggest some of the promises for future growth of the industry as follows:

"In the first place, the use of appliances by domestic consumers is in its infancy. In the second place, a large part of our rural population remains to be electrified. In the third place, the central generating stations are rapidly supplying industries with their requirements. At present over one-half the power used by industries is generated in local plants. The electric light and power industry could easily double from this class of business without any increase in industry or growth of the country."

The public utility companies of the country are alive to this situation and in the main are doing a great amount of work looking to the broader development of their territory and a greater utilization of electric power, in the home, on the farm and in industry. Notable progress has been made in this respect, especially by power companies operating in the Southern States. These have become great upbuilding forces in advancing the progress of the South.

	1927	1926	1925	1924	1923
Capacity, K.V.A. ....	29,610,000	26,812,000	24,344,000	22,000,000	19,900,000
Production, K.W.H. ....	79,350,000,000	73,793,000,000	65,870,000,000	59,014,000,000	55,674,000,000
Total customers ....	21,650,000	19,500,000	17,937,200	16,566,604	14,384,727
Customer ownership stockholders....	1,600,000	1,321,944	1,091,000	855,901	561,434
Gross revenue ....	\$1,750,000,000	\$1,569,000,000	\$1,481,600,000	\$1,354,570,000	\$1,269,550,000

force which Southern men have developed throughout America.

The South has given much of its lifeblood to the development of other sections and its contribution in that way has never been adequately recognized. The South is still sending out many of its young men, because its development has not yet reached a point where all the young men and women fresh from college can find employment at home. With the daring of the Anglo-Saxon they push out into other regions for larger fields of opportunity. Now that the tide of business and development is turning Southward it is to be hoped the people of the South will realize that the larger the industrial development of this section the greater the opportunity for keeping at home the educated brain and brawn of Southern young men and women.

### THE NEXT EDITION TO BE THE BEST EVER PUBLISHED.

Chattanooga-Gadsden-Birmingham-Lookout Mountain Scenic Highway Association.

Chattanooga, Tennessee.

#### *Editor Manufacturers Record:*

I want to confess judgment on a long overdue debt to the MANUFACTURERS RECORD. As you know, I write and speak a great deal on subjects relating to the industrial development and progress of the Southern States and the Blue Book of Southern Progress published by the MANUFACTURERS RECORD is of incalculable value to me as a reference book.

It is marvelous that so much accurate information covering every branch of Southern progress, economic and investment conditions can be gathered and properly assembled at one source and I am sure no other agency in the country could possibly do it other than your force of trained and skilled investigators and statisticians.

Everybody in the country who is in any measure interested in the progress of the South, in investments or any branch of our industry should keep a copy of the Blue Book of Southern Progress constantly in reach. There is nothing else in existence that instantly flashes before the eye such a vast, complete and accurate cardification of facts touching every phase of our Southern prosperity, progress and opportunities.

LEE LANGLEY.

The 1928 edition of the Blue Book of Southern Progress is now in course of preparation, and we feel safe in saying it will be the best edition we have ever published. It ought to go into every Southern office and home and be sent to many thousands of Northern and Western people.

## Henry Ford Unwisely Opposes Living Prices for Cotton.

THROUGH his general secretary, E. G. Liebold, Henry Ford in a letter to J. S. Wannamaker, president of the American Cotton Association, in reply to a letter sent to him and to many other leading business men throughout the country as to the importance of a living price for cotton wrote:

"Your letter of November 26 to Henry Ford has been received. Without going into this matter more in detail, we would be unable to give you any assurance of co-operation in connection with the plans you propose to make effective during the coming month. Your plan virtually means an increase in the price of cotton, and if this increase results in bringing the price high enough we would naturally be obliged to use other material.

"Very truly yours,  
E. G. LIEBOLD, General Secretary to Henry Ford."

That Mr. Ford should oppose a higher price for cotton, considering the fact that now as for some years past it has been selling at less than the actual cost of production giving a starvation income to the tenant farmers and the small cotton growers, is an amazing situation in view of Mr. Ford's professed interest in the welfare of working people. Has Mr. Ford made a careful study of what it costs to produce cotton? Has he studied the depressed financial condition of the cotton growers of the South as a whole? Has he realized that economic slavery has been fastened upon them by these low prices? Is he willing to go on record as stated by Mr. Liebold, who speaks for him, in having determined to try to find some substitute for cotton in his automobile industry if the price of cotton is advanced to a living wage? Has Mr. Ford stopped to consider the fact that the South is an enormous buyer of his cars and that with increased prosperity for the cotton growers there would be a still greater demand for the product of his factory and the product of all other factories in the country?

Mr. Wannamaker wires the MANUFACTURERS RECORD that Mr. Ford's is the only unfavorable reply which has been received in response to similar letters sent to leading business men throughout the country, without regard to section, asking for co-operation and approval in the plans he had outlined for bringing about a better price for cotton.

In reply to Mr. Liebold's letter Mr. Wannamaker covered the whole situation in an extended discussion from which we take the following extracts:

"Our plans as shown contemplate an exercise of the legitimate law of supply and demand so that the producer of cotton will secure for his crop cost plus a reasonable profit. We frankly admit that in the actual operation of these plans by us for years prior to 1920 it resulted in bringing higher prices for cotton, and it is conceded by every fair-minded student of the cotton industry that had it not been for the reduction of cotton acreage under our plans following large crops with low prices that the price would have gone even lower and conditions would have been rendered far more disastrous.

"We regret to note that you are opposed to our plans and will not only refuse to give your co-operation but will use your efforts to nullify this law by restricting consumption, using other material which you can substitute and which we might state is produced by foreign labor which ekes out a mere existence, their standard of living being lower than the cotton farmer could even exist under on account of climatic conditions, to say nothing of decency and morals.

"No nation has ever prospered and advanced without a prosperous agriculture. Thousands of years before the birth of Christ similar plans to ours were used for the protection of agriculture in Egypt. The surplus from fat years was

stored and carried into lean years. The acreage following fat years was restricted. Under these plans the agriculture and the entire nation of Egypt enjoyed great prosperity and advancement. Following this came opposition from great, powerful, selfish, political and financial interests to the retiring of the surplus of fat years to lean years, and restriction of production was prohibited. These powerful interests claimed that cheap agricultural production with starving wages was necessary to the permanent prosperity of the Egyptian nation; prices were forced so low as a result that the price for agricultural products was sufficient only to enable agricultural producers to produce under agricultural serfdom. Then came the impoverishment and the downfall of the nation as a result of the impoverishment of agriculture.

"The same conditions occurred in China which had made a great advancement under prosperous agriculture. The battle, however, for cheap agricultural products at starvation wages, with its powerful backing crushed the prosperous agriculture with high wages and the high standard of living on the farms, and as a result there today lie buried in China the remnants of that great civilization and with starvation wages we have an impoverished and sleeping nation. The same will be repeated in this nation if American agriculture, especially cotton, cannot be sold at cost plus a reasonable profit and the wages for producing the staple be a just compensation and not based upon a starvation basis as is now the case.

"Unfortunately cotton has been largely regarded as a sectional product without a due recognition of its intrinsic value to the whole nation. Without strong and forceful national co-operation, cotton produced in the Southern States will not respond to that type of efficiency which has so distinctly marked the progressive development of other lines of industry of the nation. The low prices for which the farmers have been forced to sell the staple within the past half-century have tended to lower the scale of agricultural development in the cotton States and have driven the once independent landlords from the farms to the towns and cities. This has vastly increased tenantry and has lowered the standard of production.

"Practically 60 per cent of the cotton crop is produced by tenants or share croppers, which is seriously lowering the morale of Southern agriculture. The production of cotton per tenant whose family consists of a minimum of five members, the man, his wife and his three children, is so small in aggregate value and so heavy in actual expense as to render such farmers the poorest paid laborers in the United States. Such a one is able to eke out an existence only by denying to himself and to his family everything except the bare necessities of life, with himself, his wife and his children toiling in the fields from sunrise to sunset.

"It is the nation's business so to aid and safeguard the handling and marketing of each cotton crop that every pound of the staple will bring to growers and to the nation its full intrinsic value. Every dollar the growers receive will quickly find its way into the various national channels of commerce, giving impetus, strength and activity to practically every department of American industry. America produces 84.8 per cent of the three-quarter-inch staple and above of the spinnable cotton crop of the world, and exports two-thirds of this grade of cotton each year to foreign countries. Foreign nations have expended millions of dollars within the past 60 years to produce a similar staple in other countries but without success. It would seem therefore that the present monopoly held by the United States in the almost exclusive production of this length of spinnable cotton as a world necessity will remain undisturbed in the future.

"The vital relation of the South's cotton crop to the business life of America is shown in the statement that between 1880 and 1914, or 35 years, the total value of the exports of raw cotton from the country was \$10,843,000,000. In other words, if every ounce of gold mined in the world in that period had been poured into America, it would have fallen \$2,282,000,000 short of paying America's bill against Europe and Asia for our raw cotton. Cotton, therefore, creates an enormous commerce and provides a medium of exchange that almost entirely takes the place of gold in the settlement of interstate and international balances. Cotton properly warehoused is imperishable and should always be convertible, and

possesses more of the attributes of legal tender than anything produced by human labor except gold. America controls an absolute world monopoly in the production of one inch short staple cotton. Cotton has always been regarded by the rest of the nation as a sectional product. In the light of these facts the cotton crop should most assuredly be regarded not as a sectional product but as a national product without which our foreign trade could never have attained its enormous volume, and every man in America who is interested in the nation's welfare should be enthusiastically interested in the whole cotton situation.

"Cotton is the leading product in America's commerce and international trade. Co-operation of all interests will cause cotton to develop into the greatest gold mine in the world, for the enrichment of commerce throughout the entire nation. Why, then, do you object to the cotton farmer pursuing the policy of retiring the surplus and restricting production so that he can obtain for cotton cost plus a reasonable profit that will enable him to maintain his business upon a profitable basis, pay a just compensation for wages and achieve the standard of living to which he is justly entitled?

"Your prompt attention and reply will oblige. I would appreciate it if you would telegraph me a full reply to the above."

The statement of Mr. Wannamaker covered the whole situation, although we have omitted many telling points in his letter. He has given Mr. Ford some interesting things to think about and upon Mr. Ford's answer, if he answers at all, will depend the impression of the country as to whether Mr. Ford is really as tremendously interested as he has claimed to be in giving a living wage to working people.

#### SHOULD THERE BE INTERNATIONALIZATION OF MINERALS?

**I**N a pamphlet entitled "International Control of Minerals," issued by the American Institute of Mining and Metallurgical Engineers and the Mining and Metallurgical Society of America, there is a rather extensive report entitled "Principles Relating to International Control of Minerals," first published in November, 1921, and signed by a committee of seven, including Dr. George Otis Smith, director of the United States Geological Survey, and other men of prominence in the mineral world.

In the course of that report under the heading of "Certain Minerals Exist in the United States in Inadequate Amounts" the following appears:

"The United States will be dependent on foreign sources for a considerable fraction of its supply of antimony, asbestos, ball clay, kaolin, chalk, chromite, corundum, garnet, certain grades of graphite, grinding pebbles, manganese, mercury, mica, monazite, Naxos emery, nitrates, potash, precious stones, pumice, tungsten, vanadium and zirconium."

We are rather disposed to question the accuracy of this statement as to some of these minerals. Perhaps the men who signed that report in 1921 would not do so at the present time, although the report appeared as the opening chapter of the pamphlet to which we referred and which was issued in 1925. We do not think there is any scarcity of kaolin, corundum, manganese or of some other minerals. At least there are many claims as to the abundance of some of these minerals in the United States—claims worth careful study on the part of the United States Geological Survey and other mineral interests. Certainly there is no necessity whatever for the United States being dependent for a large proportion of its supply of nitrates or potash, as both of these can be produced in the United States to any degree that may be required. Judging by the title of the pamphlet in which the statement appears, it would look as though the organizations which issued it are rather inclined to the internationalization of the minerals of the world. If so, we think they are going directly contrary to the best interests of America.

#### AMERICAN INDUSTRY MAY BE MAKING A SERIOUS MISTAKE.

**D**ISCLOSURE that "an official of a large American nitrogen company is sitting in the negotiations going on at Frankfort and Paris between France, Germany and Great Britain for the organization of a trust to control the world supply of synthetic nitrates" is made in a copyright news cable to the New York Times from Paris. Further, "it is the belief in Paris that an entente cannot successfully be created without the participation of the United States."

Thus, still again, is seen participation by American capital and industry in movements for foreign competition in the United States and throughout the world with American industry. True, the bait in this instance is held out that "the promoters of the trust are anxious to include American industry on a full share basis"; but the hook, none the less, is there which will land American capital and labor and the "white collar" man and woman high and dry on the river bank of industrial and business distress—due to the greed of gullible gudgeons.

"The nitrates entente will be a part of the chemical trust," says the Times dispatch, and adds: "The announcement that Britain signed the Frankfort dyestuffs trust agreement has been received with rejoicing in French business circles, where it is explained that the European chemical trust will be officially effective June 1, the approval of the British Government being anticipated before that date."

Prospects of foreign cheap competition are fraught with dire forebodings for the United States. When American industry and capital reinforce such hostile foreign forces, the situation becomes dangerous, indeed.

#### "TOO LATE."

**O**SCAR KING DAVIS, formerly Washington correspondent of the New York Times, publishes through Houghton Mifflin Company an extremely interesting book entitled "Released for Publication," dealing with matters of great historical interest with which he came in contact in the course of his connection with the Times. He gives some inside political history of Roosevelt, Taft and many others between 1898 and 1918. Mr. Davis represented the Times at the celebrated trial of Haywood, who with others had been indicted for murder in connection with the Western Federation of Miners in 1907. In the course of the story of that trial he gives one bit of news regarding Senator Borah and Darrow, the Socialist, which can never lose interest to the public by reason of the position these men hold. In closing one chapter of his story of this trial Mr. Davis wrote:

"One burst of eloquence from Borah will always remain in my memory. Darrow, the eminent Socialist and criminal lawyer from Chicago, who was chief of Haywood's counsel, had given vent throughout the trial to one prolonged sneer, not only at Orchard and his explanation, but at all religion, in general as well as in particular. When Borah, who had been speaking for some time, and had been rather vigorous in his delivery, reached that point in his argument, he stepped up close to the jury box, and turning halfway around, so as to see Darrow, who sat behind him, he said, in an easy, conversational tone:

"When I heard the eloquent gentleman from Chicago uttering his sneers at your religion, and at mine, there came back to me, as there must inevitably have come back to each one of you, gentlemen of the jury, the recollection of the time when, as a little boy, I stood at my mother's knee and heard her read from our Bible."

"Then, with a swift, sweeping gesture at Darrow, his voice rang out through the courtroom:

"Too late, after two thousand years, to cry 'fraud!' to the man of Calvary! Too late, in the dawn of the Twentieth Century, to write 'impostor' on the brow of the figure on the Cross!"

## Inevitable Result of a Socialized Power Industry.

**G**OVERNOR SMITH'S approval of socialization of the electric-power industry, so clearly expressed in his message to the New York Legislature, brings that question into the national arena with a challenge that cannot be ignored. With Al Smith in the White House the advocates of socialization of the power industry would receive a powerful backing. The man's sincerity and tremendous appeal to the people would draw to his banner not only the avowed Socialists but also many thousands of voters not already strongly convinced either way on this issue, and ready to follow so popular and plausible a leader.

Should Al Smith be elected and succeed in transferring the power industry from private to Federal management, he would thereby do more harm than could possibly be offset by all of the good works he might ever accomplish. That is a strong statement. To test it, let us see just where socialization of the power industry would lead us.

Government ownership and operation of water-powers is advocated on the ground that water-powers are a great natural resource, that all natural resources belong of right to all the people, and that such of them as have passed into private ownership have done so through blind folly on the part of the people and fraud and corruption on the part of the private interests securing title to them. Thus Samuel Untermyer, conspicuous champion of socialization in New York State, warm admirer and ardent supporter of Governor Smith's power program, has said in public debate: "The people are now on the eve of being deprived of their greatest remaining natural resource \* \* \* as they have had filched from them all their other fabulous billions of natural wealth. The State policy, against which the Governor has been struggling for over five years, has been and is dictated by selfish, powerful, sinister private interests."

Here we have a key to the school of thought to which Mr. Untermyer and Governor Smith belong. Mr. Untermyer makes serious charges against the methods and the policies used by the power interests to secure power franchises in New York State. His argument is, in brief, that because a State legislature can be corrupted in the handling of valuable resources, some other State body should be created by the legislature to handle them, the theory apparently being that this other body, this creature of the legislature, would be free from the human frailties that render the legislature easy prey to the predatory interests. Without stopping here to discuss the persistency of human nature, whether in a legislature or in a body appointed by a legislature, let us pursue our search for the ultimate and logical consequences of nationalization of the electric-power industry.

It is urged that the power industry should be nationalized because water-powers are a natural resource. Every argument used by Mr. Untermyer, Governor Smith and others of their school of thought for nationalization of power, except that based on the relation of power to navigation, can be used with equal force to advocate Federal ownership of all natural resources. In fact, they have been and are being so used. In and out of Congress we hear arguments in favor of socialization of coal and of oil. But the public interest in these things is no different from its interest in iron, in copper, in clay for brick and tile, in shale and limestone for Portland cement manufacture, in stone for road construction, in phosphates and potash for fertilizer. Once admit that any one natural resource should be owned and developed by the government, either State or national, and you have admitted that all natural resources should be taken away from private enterprise and turned over to the government. The public interest is of the same nature in all of them.

But what constitutes a natural resource? If all the useful deposits under the surface of the ground, whether solid, liquid or gaseous, and the water-powers on top of the ground, are natural resources, what about the one most widely distributed, most freely used and most vitally necessary natural resource between the waters of the Atlantic and the waters of the Pacific? What about the land itself? Is not this the greatest of all natural resources? If we once adopt the principle that the State has more than a regulatory power over the use of any natural resource—if we once embark upon the practice of State ownership and development of natural resources—there will be no turning back. There will be no stopping place short of complete socialization of every conceivable natural resource.

Just as there is no line between the start and the conclusion of government ownership of natural resources, so there is none between the school of thought which advocates public ownership of resources and the one which advocates public operation of essential public services. In fact, natural resources and public services are inseparable. If a water-power is a natural resource, the generation and distribution of power is a public service. The same applies to the oil in a deep-lying bed of sand, and so forth. The natural resource is worthless until the public service of its distribution makes it available.

If the land and all its products are natural resources, what about the farmer's crops? What about the dairyman's milk and butter? What about their distribution? The alleged corruption involved in the power franchises of New York State, which has inspired the eloquence of Mr. Untermyer and the long and bitter opposition of Governor Smith has never been more scandalous than the corruption charged against the milk inspection of New York city. The distribution of electricity is no more an essential public service than the distribution of milk—or of groceries, or of shoes. The arguments that apply to one apply with equal force to the other. If we once adopt the principle of government ownership of natural resources and government performance of essential public services, why not go the limit, and let an enlarged postal department distribute the farm produce from government farms, the dairy products from government dairies, the shoes made from government cattle bred on government ranches and made in government factories? Take thought for your own business, you manufacturers, you merchants, you farmers! If power is nationalized now, your turn will surely come.

If this sounds fantastic, it sounds no more so than nationalization of electric power sounded when it was first advocated in this country. If it sounds far-fetched, try and determine a logical stopping place, once we get started on the program of government ownership. Some writers are now, and long have been, advocating nationalization of all land, farms and city lots alike. The idea is by no means new.

We have always had in this country a clearly defined, logical stopping-place for government's contact with industry, and while in some places that limit has been transgressed, nevertheless, it is clearly recognizable as a line along which is fought the battle between Socialists and the rest of us. This line is the principle that all functions that can be performed by private enterprise should be so performed, and that abuses must be prevented by government supervision and

regulation. In other words, the battle is between government regulation of private enterprise and government operation *without enterprise*.

Emphatically, none of us wants to see this country reduced to the condition of a vast army of government employees, without hope of adequate honest reward for honest effort; in short, to complete communism. Yet that is where socialism leads; in fact, there is no difference. It is the inevitable conclusion of Governor Smith's program of government ownership of water-power.

The road from public ownership of water-power to complete communism is broad, clear and straight. Find a stopping place if you can.

Then where is the fallacy in Governor Smith's program? Is it not in assuming, as Mr. Untermyer so forcefully puts it, that our resources have been "filched from" us? Or that they can by any possibility be filched from us?

Are we deprived of the blessings of cheap and abundant electric power? Are we not, on the contrary, the fortunate possessors of more electric power for every man, woman and child than any other nation on earth? Mr. Untermyer says Europe knows how to do these things, but the fact remains that we have gone far ahead of Europe in the use of electric power. What difference does it make whether the legal title to this great resource is in 118,000,000 taxpayers or in a large and growing army of stock and bond holders? We use it. Any taxpayer who would have an interest, through his taxes, in a nationalized industry may buy a share in the private industry. Has not private enterprise, in giving to us the full benefits of our water-power resources, created for us also a source of investment income so sound and safe and profitable as to be classed with the best of private investment securities? Not only is no man, woman or child denied the use of this resource, but none is denied a share in its ownership. On the contrary, the public is urgently invited to participate.

If it be argued that rates are too high, then it may be said, first, that rates are lower than before the war, while everything else is higher; second, that the rates are set by State boards or commissions. If it be shown that there has been graft and corruption in the granting of water-power franchises, as Mr. Untermyer charges, then the State has been guilty of graft and corruption. If the State cannot efficiently and honestly administer this smaller service of regulation, how can it be expected to more honestly and efficiently administer the far larger service of construction and operation? Nationalization of the power industry is not for us. We are far better off as we are.

#### A NEW AND BETTER WAY.

**I**N a personal letter to the editor of the MANUFACTURERS RECORD, a well-known publicist writes as follows:

"It seems to me that Mr. Coolidge has adopted a revolution of policy in handling Mexico and that it ought to be noted. Heretofore, we have always been looking for points of divergence and trouble. Mr. Coolidge, through Mr. Morrow, seems to be looking for points of agreement and conciliation.

"In his Arlington address, on Armistice Day, at the burial of the Unknown Soldier, President Harding used a very striking phrase along these lines, although he was never able to make it operative. I cannot remember it precisely, but it ran something like this: 'In the fullness of understanding alone will be found tranquillity.' I wonder sometimes if there is any use getting mad with ignorant people. In Canada, to the north, we have a mass intelligence equal to our own. It seems to me that our Mexican problem will be solved when we have something of the same sort to the south."

"Therefore, the erection of schoolhouses, the construction of good roads, and such appeals to the Mexican mass mind as is involved in the Lindbergh flight are the key to the situation. It is a long task, of course, but most things that are worth while have to be ripened by time."

#### SOUTH'S CROPS VALUED AT \$3,612,131,000, NEARLY 40 PER CENT OF COUNTRY'S TOTAL.

ACCORDING to the Department of Agriculture, the estimated value of all crops in the United States last year was \$9,114,845,000, as compared with \$8,438,457,000 in 1926, or a gain of \$676,388,000. Based on this estimate, the Southern States in 1927 produced crops valued at \$3,612,131,000, which was 39.6 per cent of the country's total, and \$296,869,000 in excess of the \$3,315,262,000 of crops grown in 1926. On December 29 the MANUFACTURERS RECORD published a preliminary estimate covering the production and value of the South's principal crops, which showed a gain of \$290,000,000 over 1926. While the increase in the South's cotton and cottonseed was \$322,000,000, declines in the fruit and some other crops gave the Southern States a net increase of over \$296,000,000, which is more than one-third of the country's total gain compared with 1926. Although the South produces practically all of the country's cotton, this crop, with a total value of \$1,429,352,000 in 1927, represented less

#### HYPOTHETICAL VALUE OF ALL CROPS AND RANK, BY STATES AND GEOGRAPHIC DIVISIONS.

(Estimates of the Department of Agriculture based on December 1 prices and compiled by Manufacturers Record.)

States and Geographic Divisions	1926 Value	1927 Value	1927 Rank
Alabama . . . . .	\$173,263,000	\$225,428,000	20
Arkansas . . . . .	186,176,000	193,500,000	22
Florida . . . . .	85,815,000	88,676,000	33
Georgia . . . . .	211,804,000	250,685,000	15
Kentucky . . . . .	174,083,000	169,048,000	26
Louisiana . . . . .	135,623,000	145,159,000	29
Maryland . . . . .	69,772,000	70,346,000	35
Mississippi . . . . .	188,211,000	226,018,000	19
Missouri . . . . .	276,399,000	272,684,000	12
North Carolina . . . . .	320,457,000	361,605,000	7
Oklahoma . . . . .	303,206,000	274,779,000	10
South Carolina . . . . .	140,344,000	167,432,000	27
Tennessee . . . . .	180,577,000	181,919,000	24
Texas . . . . .	626,510,000	729,754,000	1
Virginia . . . . .	168,995,000	182,665,000	23
West Virginia . . . . .	74,027,000	72,433,000	34
South . . . . .	<b>\$3,315,262,000</b>	<b>\$3,612,131,000</b>	<b>1</b>
Maine . . . . .	\$81,139,000	\$58,620,000	36
New Hampshire . . . . .	19,549,000	18,570,000	45
Vermont . . . . .	42,130,000	36,635,000	40
Massachusetts . . . . .	45,310,000	44,612,000	38
Rhode Island . . . . .	4,594,000	3,780,000	48
Connecticut . . . . .	37,333,000	36,178,000	41
New England . . . . .	\$230,055,000	\$198,395,000	7
New York . . . . .	\$284,877,000	\$259,996,000	14
New Jersey . . . . .	53,120,000	50,029,000	37
Pennsylvania . . . . .	260,295,000	249,084,000	16
Delaware . . . . .	14,522,000	16,214,000	46
Middle Atlantic . . . . .	\$612,814,000	\$575,323,000	5
Ohio . . . . .	\$300,703,000	\$266,803,000	13
Indiana . . . . .	224,994,000	213,859,000	21
Illinois . . . . .	391,357,000	385,052,000	4
Michigan . . . . .	251,160,000	227,617,000	18
Wisconsin . . . . .	301,225,000	305,972,000	9
East North Central . . . . .	\$1,469,439,000	\$1,399,303,000	3
Minnesota . . . . .	\$325,980,000	\$324,449,000	8
Iowa . . . . .	441,026,000	501,725,000	2
North Dakota . . . . .	192,304,000	274,699,000	11
South Dakota . . . . .	121,769,000	240,833,000	17
Nebraska . . . . .	254,403,000	378,819,000	5
Kansas . . . . .	333,387,000	362,589,000	6
West North Central . . . . .	\$1,668,869,000	\$2,083,114,000	2
Montana . . . . .	\$112,729,000	\$161,662,000	28
Idaho . . . . .	93,876,000	108,280,000	31
Wyoming . . . . .	30,281,000	32,590,000	43
Colorado . . . . .	108,838,000	123,524,000	30
New Mexico . . . . .	34,805,000	29,542,000	44
Arizona . . . . .	26,492,000	33,954,000	42
Utah . . . . .	36,851,000	37,129,000	39
Nevada . . . . .	9,047,000	8,153,000	47
Mountain . . . . .	\$452,919,000	\$534,834,000	6
Washington . . . . .	\$147,382,000	\$169,460,000	25
Oregon . . . . .	89,356,000	107,072,000	32
California . . . . .	452,361,000	435,213,000	3
Pacific . . . . .	\$689,099,000	\$711,745,000	4
Total United States . . . . .	<b>\$8,438,457,000</b>	<b>\$9,114,845,000</b>	<b>..</b>

than 40 per cent of the aggregate value of its crop output. The South leads all of the geographic divisions of the country in crop values.

New England, the Middle Atlantic and East North Central States showed declines in crop values last year compared with 1926, while gains were reported for the West North Central, the Mountain and Pacific Coast States, the West North Central States leading with a gain in crop values of \$414,245,000.

The ranking State in the value of crops was Texas, which has held first position of all the States in the Union for the past several years. Texas crops were valued at \$729,754,000, or a gain of \$103,244,000 over 1926. With the exception of Kentucky, Missouri, Oklahoma and West Virginia, every Southern State reported increased crop values compared with 1926.

#### A NEW YORK BANKER'S COMPARISON OF SOUTHERN CALIFORNIA AND FLORIDA.

**R.** M. GRANT & CO., INC., bankers, of New York, Chicago and Boston, who are handling an issue of West Palm Beach bonds, have sent out an attractively printed circular, the cover page carrying a striking comparison between Southern California and Florida as follows:

"The best determination of the future can be made by judging it in the light of the past. The past most like Florida is Southern California. It is only a few years ago that similar conditions existed there that have existed in Florida. Investors were told that Southern California had no commerce, no industry, in short, no future, only climate and sunshine to sell to tourists who were attracted for a few months in the winter; yes, and citrus fruits the same as Florida. Los Angeles and the other communities had their real estate boom and its collapse, and the calamity propagandists never finished telling investors Southern California would all but disappear from the map when the tourists' whims attracted them elsewhere. Like Florida bonds now, Southern California political subdivision bonds then were bought by the farsighted investor who believed in the United States, the people and the prosperity of both, at yields very much greater than were to be had from the bonds of communities in other parts of the country.

"Notwithstanding, Florida having come sharply into competition with Southern California because primarily of Florida's having a much better and more equable climate and being only one-half the distance—two days as against four—from more than four-fifths of the population of the United States, Southern California today is more substantial and prosperous than ever before. Probably more people sojourn there in the winter than heretofore, but it is no longer regarded as a winter resort. It is the year-round residence of many people who first visited the State as winter sojourners. Los Angeles, a metropolis, is the largest city on the Pacific Coast. Today the bonds of Southern California political subdivisions yield from 4.05 per cent to 4.25 per cent."

Further discussing this subject, the circular-letter says:

"Beyond the memory of living man, with but a small part of the population, resources and wealth of today, people have sojourned away for climatic reasons during the summer months. Now, with greatly increased population and particularly infinitely greater and increasing wealth than ever before, and consequently leisure, an increasing number are seeking not only temporary residence during a part of the year, but many are making their permanent homes where the weather conditions are more clement. Southern Florida, with its unequalled winter climate and delectable surrounding conditions, has only become of age and is destined not only to maintain the position this part of the State has attained in this respect, but to attract each winter an increasing number, many of whom will become year-round residents as they have in Southern California."

A statement issued by the commissioner of the Department of Agriculture of Florida, quoted in this circular, is to the effect that every State in the nation, save 10, can be reached by rail from Jacksonville within 48 hours. The population of these States is 95,524,000, which is a little more than 90 per cent of all the population of the United States.

#### SOME CHANGES IN WORLD TRADE IN HALF A CENTURY.

**F**IIFTY years ago the editor of the MANUFACTURERS RECORD read with much interest a paper which had been established in the interest of the export trade of this country. At that time, as a writer on economic questions and especially those relating to the foreign trade in grain, cotton and other commodities, he became greatly interested in this new newspaper venture to be devoted entirely to the development of foreign trade. The name of the publication was the American Exporter. That paper has just published its fiftieth anniversary issue, which covers in an interesting way many facts about American industry in international trade. Like its regular monthly edition in English, it is issued also in French, Spanish and Portuguese.

Reviewing some of the things which have come into existence during that half-century of its life, the American Exporter calls attention to the fact that it is practically of the same age as the incandescent lamp, the typewriter and the telephone, all of which have profoundly affected national and international trade. Other inventions of the past 50 years which have likewise influenced the trade of this country and of the world, and which are referred to in this special issue, are:

- Electric trolley car, 1884;
- First successful fountain pen, 1884;
- Cash register, 1885;
- Hall process of making aluminum, 1886;
- Automatic knot-tying harvester machine, 1888;
- Recording adding machine, 1888;
- Transparent photographic film, 1888;
- Electric welding, 1889;
- Vacuum bottle, 1892;
- Automobile, 1892;
- Motion picture machine, 1893;
- Caterpillar tractor, 1900;
- Aeroplanes, 1901;
- Radio, 1922.

During this fifty-year period there have been many changes in business methods in America, and elsewhere over the world. Fifty years ago the country was just beginning to catch its breath after the terrific panic of 1873. By 1879 it was in the full swing of a wild business boom which carried pig-iron to very high prices, and which was coincident with heavy grain crops and enormous demand from Europe for wheat and corn. The writer well remembers that in his statistical work at that time he reported one week the charter of over 80 vessels to carry full cargoes of grain from Baltimore to Europe, most of these vessels it is true being of moderate tonnage as compared with the enormous tonnage of today, and all of them being sailing vessels.

There is one point made by the American Exporter in this special issue which is of particular world-wide interest, and that is the control that has been secured of yellow fever and other tropical diseases which has made possible the development of tropical countries, and with a trend of business and population in many cases to countries which in former years were regarded as undesirable because of those diseases.

It is pointed out that export trade is by no means new to American manufacturers, and this is well known to every business man whose memory of business conditions runs back beyond that 50-year period which the American Exporter is celebrating. Long prior to the Civil War, for instance, Baltimore clipper ships sailed the Seven Seas of the world and carried a varied line of products to all the open ports of the world at that time, and Baltimore was only one illustration of the wealth created in different ports, North and South alike, by this foreign trade movement.

Of 600 manufacturers represented in the advertising pages of this special issue of the American Exporter, on an average they export 18 per cent of their total output; but nine

manufacturers report that 90 per cent of their business is export, and two-thirds of them report an increase in export business in 1927 over 1926.

The American Exporter came into existence by reason of the inspiration created by the Philadelphia Centennial of 1876. It was founded a few months later by Charles T. Root, now chairman of the Board of the United Publishers Corporation, and his partner, the late Franklin H. Tinker. They disposed of the publication to the manager, John C. Cochran, who in 1905 sold it to the late William J. Johnston, who was founder and publisher for 25 years of the Electrical World. Since 1907 the American Exporter has been published by his sons.

Attention is called in this special issue to two outstanding world figures of fifty years ago, men still prominent as world figures. These are Thomas A. Edison, who was even then famous all over the world for his inventions, and Arthur J. Balfour, now Earl Balfour, who was then active in British politics as he is now.

When the American Exporter was started Calvin Coolidge was five years old. John J. Pershing had not then entered West Point. Henry Ford was earning \$3.00 a week at that time, and it was 26 years after that before his motor company was established. John D. Rockefeller had founded the Standard Oil Company seven years earlier. General Grant had just returned from his triumphal trip around the world. Porfirio Diaz was serving his first term as President of Mexico after nearly 20 years of constant warfare. Disraeli was Prime Minister of Great Britain, and Gladstone was leader of the opposition.

What a mighty host of men active in world affairs fifty years ago have since passed over to the other world. How few, active then, remain to the present time! The writer can recall a few hundred names of men, then outstanding figures in the life and business development of the South, of whom only one or two remain. His early acquaintance with these men who were a generation ahead of him in age, came about by reason of the work they were doing for Southern development, and to which he was trying to give publicity. Many of the men who today stand out conspicuously in this and other countries for pre-eminence in business, in literature and in science, are men who were born long after the American Exporter and the MANUFACTURERS RECORD were established.

The American Exporter has done well in issuing its Golden Anniversary edition and crowding into it so many facts of interest to the men of today. The older ones, who were here fifty years ago, will be particularly interested in reviewing through this special issue some of the outstanding facts in regard to the development of international trade; while the younger men who are now active in domestic and foreign trade, and those who are fitting themselves for this work, can study to advantage some of the things that have been accomplished in the last 50 years.

And what a marvelous change has been wrought in that time! How the telephone and wireless telegraphy, the radio, the airplane and hundreds of other modern inventions have completely changed the whole world and all its business interests! In the days when Baltimore clipper ships carried their cargoes to Europe, to Asia, to Africa, and to South America, they would often be gone on a three-year voyage, taking along a supercargo who would sell the products carried out on the voyage, and trade other products from port to port, finally returning after a three-year absence; and during all that time the only word that could come to the owners was by slow mail carried by sailing vessels. Contrast these conditions with the manner in which every part of the world is reached today almost instantaneously, and we can comprehend something of the changes that have come about in the world in the last half century.

## WHY CONVENTIONS SEEK THE SOUTH.

LIKE industry, finance, commerce, agriculture, religion, education and other lines of American life, politics now has turned to the South as the most practical and engaging site for a great convention. The Democratic party, through thousands of delegates and visitors who always attend these Presidential conventions, will meet at Houston in June.

The number of national conventions held of late in the South runs into double digits. Very recent at Houston, for instance, was the meeting of the American Bankers Association, and the same city, next April, will entertain the great National Foreign Trade Council, with visitors from all parts of the world, and Baltimore has been selected for 1929. Virtually every Southern State, and more than one city in each, has lately entertained or will entertain a great and important convention of national influence and weight.

For all this there is more than one reason. No longer is the South regarded as a section out of sympathy with New England or the North or the West; no longer is it remote, far removed in distance and time from any part of the country; its cities offer adequate and generous accommodations and comforts, and the hospitality of the South is proverbial. In short, the cities of the South not only provide all the practical requirements for any great convention, but also assure delightful weather at any season of the year, a balmy climate, and the recreational facilities appropriate to such outdoor enticements.

Reciprocally, a great convention is of value to a Southern city, and there is no doubt that many committee men and women who voted for Houston for the Democratic convention had heard of its delights, and the delights of other Southern cities, from persons who had attended conventions there or at some other city of the South. Nor is the publicity for a convention city confined to the datelines in news dispatches, but is spread also by organizations which propose to hold conventions. For instance, as this is written, comes a letter from Secretary O. K. Davis of the National Foreign Trade Council, of which James A. Farrell, president of the United States Steel Corporation, is chairman, saying:

"Our whole world trade is growing, and from Houston, you may be sure, we will take a good, square look at the remarkable strides of progress that are being made in Latin America. Houston is a first-class place for such work. Many of you have been there and know the quality and extent of Texas hospitality and enthusiasm. They are all set to give you a great time and to prove to those who haven't been there that it is well worth while to go, and to those who have been that it is worth while to go again. Lots of railroads reach Houston, and they are all alert to show you what service they give. There will be a big railroad folder coming along pretty soon, with plenty of attractive special service announcements. So, put the mark on the pad now—April 25, 26 and 27."

There is real, helpful publicity not only for Houston, but also for all the South. "Those who haven't been there will find it well worth while to go; to those who have been it is worth while to go again"—a statement by Mr. Davis which will receive sincere and hearty endorsement from all who have attended conventions in any Southern city.

More and more are great national organizations turning to the South for convention sites. The South welcomes them with sincere hospitality and will prove beyond question that such selections are based on the best of good judgment.

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The oil and gas division of the Railroad Commission, Austin, Texas, granted 9027 permits during 1927 to drill oil wells, 2434 permits to shoot wells and 3976 to plug.

# Road Builders Hold Great Show and Convention.

**A QUARTER CENTURY OF PROGRESS CELEBRATED—NEW DIVISIONS ORGANIZED—DELEGATES FROM 25 COUNTRIES VIEW EIGHT ACRES OF EXHIBITS.**

By CARROLL E. WILLIAMS.

Cleveland, Ohio, January 14.

The greatest road show and convention in the history of the American Road Builders' Association, celebrating a quarter of a century of progress, was held here this week and upward of 25,000 visitors and delegates attended. Eight acres of exhibits of much that is newest and best in mechanical equipment for the building of roads, pavements and bridges drew visitors to the show from all parts of this country, from South America, Central America, Canada, Alaska and European countries.

Nearly 350 separate exhibits of machinery, equipment and materials crowded to capacity both floors of the mammoth public auditorium, the basement in the new north wing now being constructed, the covered esplanade connecting the west wing and the main building, overflowed into the Central Armory just across the street from the auditorium and covered a big area on the grounds immediately surrounding the exhibition buildings. Exposition history was made in Cleveland, for the space occupied by exhibits was greater by one-fourth than utilized by any previous show.

The convention sessions were held at the Hollenden Hotel and representatives of nearly 25 nations participated, giving the meetings an international flavor. Beginning early Monday, following the formal opening of the show, convention sessions were held each morning and afternoon for the various divisions that go to make up the association, featuring those of particular interest to road contractors and allied professions; to engineering and allied interests; to road builders in general and the public at large; to city officials; to State officials; to county officials and to manufacturers of highway building equipment, machinery and materials.

### **Organization of New Divisions Marks New Epoch in Association's History.**

Created 25 years ago to stimulate interest in improved highways and to acquire and disseminate information concerning highway construction, maintenance and operation, the American Road Builders' Association now represents all branches of the highway industry. Officials of the organization believe that the formation of new divisions at the meeting just closed clearly marks a new period in its development that will have a great influence on the building of tomorrow's highways in this country and throughout the Americas, in the control and regulation of traffic on highways and streets, in the development of new methods of road construction, maintenance and operation and in the co-ordination of county, district and State roads, as well as city streets, into a network forming a true natural system, capable of handling the steadily growing volume of motor-vehicle traffic economically, efficiently and safely.

The space actually available for exhibits exceeded by 67 per cent that available at last year's show, and one exhibitor reported ten times more visitors at his booth this year than at any previous show, due to the uncrowded condition. C. M. Babcock, president of the association and State Commissioner of Highways of Minnesota, said that the attend-

ance at the meetings were not only larger than ever before, but also the interest of the delegates in discussing various papers marked a new epoch in the association's development.

### **Exhibits, Numbering 350 Cover Eight Acres.**

To house the great displays, five separate exposition spaces were utilized. The assembling of this vast amount of machinery and equipment, ranging in size from small bolts to giant road-building machines weighing 90,000 pounds each, was in itself a big task. But, due to the carefully prepared plans outlined by Charles M. Upham, business director of the Road Builders' Association, the task was completed on time. Six trains of 50 cars each were needed to transport the \$3,000,000 worth of machinery going to make up the exhibits, and many machines were run from the cars on the sidings and into the buildings under their own power. Illustrative of the steps necessary for handling these big pieces of equipment may be pointed out the following: A crane intended for exhibit purposes in the armory was too big to pass through the doorway. There was no thought of barring the machine because of its size; the question was how to get it in the building. Accordingly, a big door frame was removed, the sidewalk and a part of the armory floor were torn up and a trench was excavated so that the machine might be skidded into the center of the building where the ceiling height was sufficient to house the device. There was no excitement over a piece of machinery too delicate to be handled in the usual manner or too large to be moved through the regular entrances, and a satisfactory solution was found for each problem in moving that came up.

### **Co-operation With Latin America in Building Highways Urged.**

In his address President Babcock said:

"It has been well said that, if the automobile had been invented and adequate roads had been built 75 years ago, there would have been no Civil War. It is certain that the people of the North and the South, the East and the West know and understand each other better than they ever did before. The people of Maine and Oregon are closer now to each other than the people of Massachusetts and Virginia were when our nation was born."

"The sentiment of this organization regarding the international aspect of improved highways was voiced by President Coolidge in his recent message to Congress, when he expressed the hope that engineers from the United States might co-operate in road building in other American republics, and that American capital might look with favor upon projects for financing highways in the countries to the south."

"I am a strong advocate of State traffic patrol as a means of promoting safety on the highways. Such a patrol, under the State highway department, should be established in every State which does not now have one."

Plans for extending the scope of the association through creating new divisions and merging others were outlined thus by Mr. Babcock in his address of welcome: "The vital importance of modern highway building is becoming more

appreciated each year, and on this anniversary of the American Road Builders' Association we feel that we have presented a meeting which is in keeping with this progress. The size of the convention and road show demonstrates the magnitude of the road-building industry."

#### *Highway Accidents Assume Staggering Proportions Throughout the Country.*

"Each year the casualty toll of highway accidents is twice the entire number suffered by the United States during the World War," declared Mr. Upham, reporting on the highway safety campaign conducted during 1927 by the association. "For a five-year period ending with 1927 investigation shows 3,500,000 persons injured, 114,000 persons killed and an economic loss exceeding \$3,000,000,000. The individual alone holds the key to the solution of the traffic problem," said Mr. Upham, and he outlined the program followed in the recent campaign, made through the press, the church, various civic organizations, etc.

An address on "Practical Application of Highway Safety" by J. H. Brown, editor and manager of Motor Touring and Camping, demonstrated the effectiveness of pledges in the interest of safety. Mr. Brown said that 18 years ago he had purchased an automobile against the wishes of friends, who feared that because of his being deaf he was not fitted to drive a car. When he learned to drive he prepared and signed a pledge promising to exercise caution and courtesy in driving at all times. Later he organized annual automobile tours and has directed such tours of from 18 to nearly 300 cars through all parts of this country, no driver being permitted on a tour who refuses to sign such a pledge. No automobile in these annual tours has ever figured in an accident. Mr. Brown urged the association to continue its efforts to have drivers pledge themselves to "courtesy and caution" in driving.

The constructors' sessions opened with Gen. R. C. Marshall, Jr., manager of the Associated General Contractors of America, Washington, presiding, the general subject under discussion being "Improvement in Construction Practices." Alan J. Parrish, president of the Illinois Association of Highway and Municipal Contractors, Paris, Ill., discussed "False Credit in the Highway Industry"; A. R. Hirst, chief engineer of the American Vibrolithic Corporation, Washington, "Bonding Practices That Should Be Abolished." Answers to "What Does Overexpansion Mean to the Road Building Industry?" were presented by Edmund J. Donegan, general counsel of the Metropolitan Casualty Insurance Company, New York city. George E. Schlesinger, Department of Highways and Public Works, Columbus, Ohio, spoke on "Demonstration of Responsibility a Prerequisite for Securing a Highway Contract."

"Highway Problems" was the general subject that occupied the meeting of the engineers. Fred E. White, chief engineer of the Iowa State Highway Commission, Ames, Iowa was the presiding officer. W. R. Creighton of Foster & Creighton Nashville, Tenn., presented a paper, "Demonstration of Responsibility a Prerequisite for Securing a Highway Contract." "Footprints of the Engineer" was the subject of a paper by J. B. Weaver, attorney, Des Moines, Iowa. R. G. Giles, chief engineer of concrete control for the Blaw-Knox Company, Pittsburgh, Pa., discussed "Measuring Materials for Concrete."

#### *Central and South American Countries Awakening to Need for Improved Highways.*

Good roads through Mexico, Central and South American countries will do more toward establishing friendly relations than any one agency—such was the consensus of opin-

ion of delegates to the convention. American tourists were urged to take advantage of the scenery and climate of the countries to the south of the United States, and American capitalists were invited to invest funds in road-building enterprises now under way and planned. What these countries are doing in the way of building and maintaining highways was strikingly revealed in papers and motion-picture films presented at the Pan-American session, which was one of the best attended and most enthusiastic meetings of the week. William A. Reid foreign-trade adviser of the Pan-American Union, Washington, who presided at the session in the absence of Dr. E. Gil Borges, assistant director of the Pan-American Union, told in a general way of road-building activities in Latin American countries and of the steps being taken by daring motorists to open up to tourists these countries. One trio, he said, traveled over the route from Rio de Janeiro, Brazil, to Lima, Peru—a 5000-mile trip—with only 200 miles of improved highways on the route. Senor Antonio Madrazo, head of the Mexican delegation to the convention, and co-chairman of the meeting, pledged the fullest co-operation of his country to the completion of the international highway project connecting the two Americas. Julio Garcia, consulting engineer of the same commission, described the progress that is being made in Mexico in highway development, in which American machinery is being extensively used. A vivid word picture of road work in Colombia was painted by Julio Fajardo.

Thus, in the Latin-Americas, is being created a vast market for American brains, machinery and materials. Explosives in big quantities, tractors, power shovels, crushing plants and road building and maintaining equipment in general will be needed to carry forward this work and practically without exception this country will be called upon to supply these needs.

#### *Road Building Declared Prime Factor in Development of Foreign Trade.*

The building of more and better roads is a prime factor in the development of commerce, declared George J. Eder, chief of the Latin American section of the bureau of foreign and domestic commerce, Washington. The annual United States trade of \$2,000,000,000 with Latin-American countries could possibly be increased to \$3,000,000,000 if improved highways were provided for the section. Good roads will unify the countries of North and South America as nothing else will do, said Mr. Eder, and will promote peace, cultural and spiritual development in the Latin-American countries.

Problems that confront the road builder in Alaska were told by M. D. Williams, district engineer of the United States bureau of public roads at Juneau, and Ismeal de La Barra, highway engineer, discussed the need for a great intercontinental road. Eladio N. Villa, Havana, reviewed the road building development in Cuba.

#### *Snow Removal Necessitates Big Expenditure in Many States.*

Highway operation was discussed with V. R. Burton, Michigan State Highway Department, talking on "Snow Removal."

The adoption of uniform methods of control and practice in traffic regulation and uniformity in equipment will largely solve the country's traffic problem, said Sidney J. Williams, director of the National Safety Council, Chicago, speaking on "Traffic Irritants," and Homer D. Howard, pilot of the Panama Limited, crack Illinois Central train, told the road builders of the emotions of the men who sit at the throttle when crashes come in grade crossing accidents.

The formation of a City Officials division of the association was decided upon, a motion to that effect being made by Keith Compton, director of public works, Richmond, Va. In

advocating the organization of this division, speakers pointed out that great good could be accomplished in the solution of the traffic problem by the co-operation that would be made possible between county, State and city officials—the two former groups having been previously organized as divisions of the association. Also, formation of a Pan-American division was assured.

The Highway Industries Association became the Manufacturers division of the American Road Builders' Association as the result of action taken at its annual meeting. The directors of the new division elected the following officers: President, Lion Gardiner, Lakewood Engineering Company, Cleveland; vice-president, Chester H. Lehman, Blaw-Knox Company, Pittsburgh; secretary, R. H. Hume, Gillette Publishing Company, Chicago; treasurer, W. R. Karl, LeRoi Company, Milwaukee, Wis.

Judge John J. Sullivan of Cleveland presided at the annual banquet, the speakers including Mr. Babcock, James H. MacDonald, New Haven, Conn., treasurer of the association; Charles M. Upham, Mayor John D. Marshall, City Manager William R. Hopkins; Sir Edward McGill, and William H. Speer, attorney of the New Jersey Public Service Corporation.

The Thursday sessions of the convention were turned over exclusively to county officials, a total of 1600 having been registered. Four reports summarizing research and experiments during the past year were presented and C. L. Clemmer read a paper recommending that each county should have a planning commission. Charles E. Grubb, engineer, Wilmington, Del., submitted a report on county highway construction and F. B. Wilkes, Columbia, Tenn., and W. W. Chadsey, Schenectady, N. Y., submitted interesting papers.

How improved roads at low cost may be constructed to cover the 2,725,000 miles of county and township controlled systems—91 per cent of the total road mileage of the country—was explained by C. N. Conner, chairman of the low cost improved road investigation of the highway research board, Washington. It was the consensus of opinion of the delegates that this was one of the most important questions before road builders today, for the building of such roads will go far towards developing vast areas of the country that are now lagging because of the lack of adequate systems of year-round highways. These roads will, in addition to carrying for a number of years light traffic, serve as a base for higher types of roads.

The following committee reports were presented at the Thursday afternoon meeting: County Highway Legislation, H. B. Keasbey, engineer, Salem, N. J.; County Administration, R. B. Preston, engineer, Norfolk, Va.; County Road Construction and Maintenance Equipment, E. L. Gates, Wheaton, Ill.; County Highway Finance, John J. McHugh, Jersey City, N. J.

R. Keith Compton, who in May will assume the duties of president of the association, outlined the following plans for 1928: See that the activities of the county officials' division organized a year ago are further extended; have the city officials group consider the latest developments in city planning and building thoroughfares, and to promote a better understanding between municipal, county and State highway officials; encourage the extension of American road building methods in Central and South American countries, with a view to developing commerce and goodwill; encourage the continuance in office of competent highway officials in opposition to political juggling, and continue efforts for completion of the international highway through Mexico to Central America.

"An immediate revision of the Federal Aid Road law is essential to bring economical and unhampered communication in the West," a prominent official said. Federal aid is now limited to \$15,000 per mile on State roads. Officials of

the association point to the inequity of this limitation, because of varying conditions met with in the construction of highways in different localities. A substantial increase in appropriations for roads in Indian reservations is also needed, they declare. Legislation covering these points is now pending in Congress.

While the selection of the next convention city will not be made until May, five cities are competing with Cleveland for the 1929 show—Atlantic City, Chicago, New Orleans, Kansas City and New York.

#### \$13,500,000 Dairy Merger in Baltimore.

Plans have been worked out for the consolidation of the Western Maryland Dairy Corporation and the Fairfield Farms Dairy, Baltimore organizations, whose capitalization will represent approximately \$13,500,000. The consolidated company is expected to control about 90 per cent of Baltimore's milk supply. Charles R. Bowman, president of the Fairfield Farms Dairy, will become president of the consolidated company, while Irvin D. Baxter, chairman of the board of the Western Maryland Dairy Corporation, will hold the same position in the new company. George S. Jackson, retiring as president of the Western Maryland Company, will become vice-chairman of the board.

This combination, it is said, creates the largest independent company of its kind south of Philadelphia, and is expected to result in gross sales of \$14,000,000, of which the Western Maryland sales are estimated at \$9,000,000. Economies of operation are also expected to be effected. Financial details of the deal were handled by Gillet & Co., local bankers.

#### "Entirely a Southern Product."

In both its treatment of the subject and its physical form, "Arithmetic Drill Book," a manual by Prof. Henry G. Bennett and Prof. N. Conger and Gladys Pelton Conger, published by the Turner E. Smith Company, Atlanta, Ga., is a volume of the highest type. The book is of peculiar interest to the South, in that it emphasizes the development of the manufacture of cotton textiles and the development of Southern printing facilities, being described by the publishers as "entirely a Southern product, made from paper manufactured in Tennessee, bound with cloth manufactured in the same State, and the composition set by native workmen trained in recent years to do the most difficult composition." The nature of the subject demands exact accuracy, and this demand has been met. The manual is of interest as a printer's product, as well as of value in the treatment of its subject, designed to facilitate the teaching of oral and written arithmetic in all grades from three to eight, inclusive.

#### 1927 Lumber Cut 35,000,000,000 Feet.

Lumber production of the organized portion of the American industry for 1927 was 14,279,520,478 feet, states the National Lumber Manufacturers Association. Total shipments fell slightly under the production. Sales were 14,184,528,898 feet, not including production used locally, which probably exceeded 3 per cent, or over 400,000,000 feet.

The experience of the past has shown that the mills affiliated with the National Lumber Manufacturers Association through the various regional associations produce about 40 per cent of the whole output. Applying this percentage, the total production for 1927 was approximately 35,000,000,000 feet, as compared with 36,936,000,000 feet for 1926 and 44,509,000,000 for 1909, the record year.

## Lighted Airway Ready from Texas to Great Lakes.

Through virtual completion of the airways between Dallas and Kansas City and between Kansas City and Chicago, a lighted air route now extends from Northern Texas to the Great Lakes regions, according to a report recently issued by the aeronautics branch of the Department of Commerce. Also, the department has issued an airway map, with distances, brought up to date and showing the projects in the Southern area at the present.

According to this report, survey work for the location of fields and beacon sites on the Louisville-Cleveland route is nearing completion under the direction of Superintendents W. F. Centner and J. E. Sommers, and "work on this route is progressing satisfactorily and it is planned that the survey work will be substantially completed very soon."

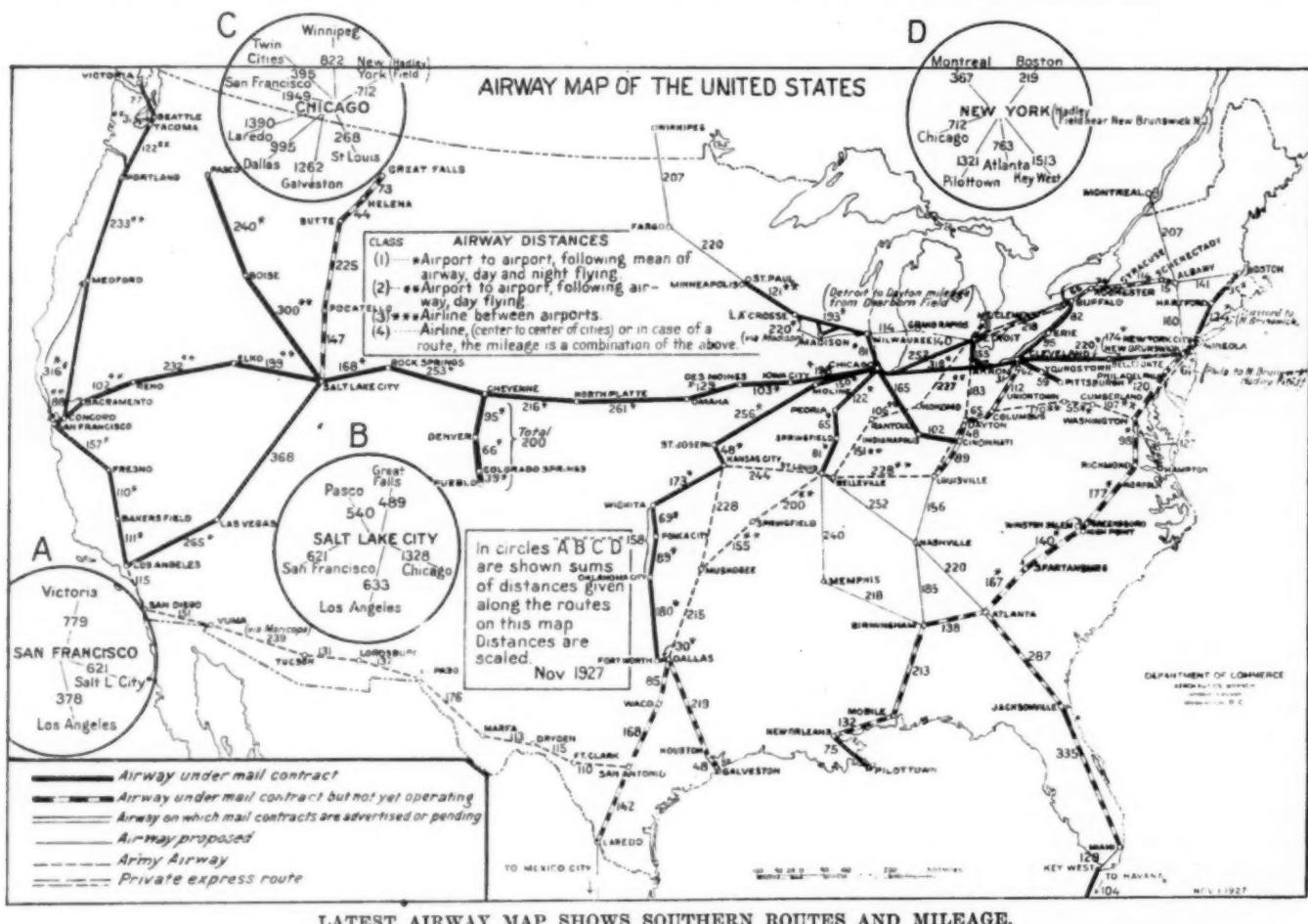
"The Dallas-Kansas City airway has been practically com-

pleted, only a few minor items remaining unfinished," says the report.

Except for minor details, the Kansas City-Chicago airway is practically finished, and the constructing company has moved its working parties to another project.

On the Atlanta-New York airway, construction work is in progress on the Spartanburg-Greensboro section by the Harrison-Wright Company and on the Richmond-New York section by the Limestone Products Company. Early commencement is planned for work on the Atlanta-Spartanburg stretch by the Harrison-Wright Company and on the Greensboro-Richmond route by the William E. Arthur Company.

The joint survey for the Chicago-Dallas route was made by Thomas H. Chapman of the aeronautics branch and V. E. Jakl, field co-ordinator of the weather bureau.



### Diversification Brings Prosperity to This Mississippi Community.

J. T. Ruble, secretary, Corinth Saw Mills, Inc., writing from West Point, Miss., calls attention to recent shipments of four carloads of turkeys which brought nearly \$18,000 to that community. Commenting on this, Mr. Ruble says:

"Diversification, dairying, stock and poultry raising, in a measure, is doing for this section of Mississippi what steel has done for Pittsburgh, what high power has done for the Carolinas, what oil has done for El Dorado and what gas is doing for Louisiana—has pulled us out of the mire of debt and the 'one-crop' system into the realm of prosperity and plenty."

"Clay county is one of the smallest counties, if not the smallest, in the State, in area of square miles and of population and a few years ago the two banks in the county site,

West Point, with 5000 population, could only muster a little less than a half-million dollars of deposits. Today the five banks in the county show nearly \$3,000,000 on deposit and with the farmers as a rule taking care of themselves financially. Dairy cows, baby beef, pigs and chickens have scratched the old picture off the canvas and painted the new."

### \$750,000 Mausoleum for Baltimore.

Plans are being made by Buckler & Fenagen, local architects, for a \$750,000 mausoleum to be erected in Greenmount Cemetery, Baltimore, for the Greenmount Cemetery Company. The structure will be three stories, about 50 feet high, 85 feet in diameter, of granite and marble and will contain space for 526 entombments. A chapel will occupy the center of the ground floor. E. B. Webb will handle business details of the project.

## The Truth As to Muscle Shoals Vs. Some Blunders of a College Professor.

[Indicative of the wild way in which many people talk, even supposedly well-informed men, is a letter recently received by the editor of the Manufacturers Record from the principal of the preparatory department of a college in the South. While giving unbounded praise to the work of the Manufacturers Record, he incidentally referred to the Alabama Power Company, stating that this company "wanted the Government to scrap Muscle Shoals and would not make any bid until Henry Ford waked them up; now they are making a profit of some 1100 per cent on the power they are renting from the Government."

We regret to say that in very many colleges and in other institutions information equally as unreliable as this is put out.

In order to give a presentation of the whole subject, although the Manufacturers Record had often covered it before, we asked Thomas W. Martin, president of the Alabama Power Company, to make a specific reply to the two charges made, viz: That prior to the offer of Henry Ford the Alabama company had advised the scrapping of Muscle Shoals power development and that it was selling power leased from the Government at a profit of 1100 per cent. Mr. Martin's reply, as given below, is a complete answer to these charges, but we sometimes wonder if it will ever be possible to induce men in responsible positions to get at exact facts before they make definite statements.—Editor Manufacturers Record.]

Alabama Power Company.  
Birmingham, Ala., December 23.

### *Editor Manufacturers Record:*

We are always glad to have the opportunity of presenting to those interested in educational work the true economics of the Muscle Shoals matter. We have many times explained our position in submitting an offer for the Muscle Shoals plants, and I am briefly reviewing them below.

We submitted to Congress through the Muscle Shoals Hydro-Electric Power Company—a subsidiary of the Alabama Power Company—two offers in connection with the Muscle Shoals situation a number of years prior to the submission of the Ford offer. The first offer was made in 1913 and the United States Army Engineers made a study of the offer and in their report to Congress (House Doc. 20, 63d Cong., 2d Sess.) the Chief of Engineers used the following language:

"Bids were invited by a special board for co-operation by water-power interests in the proposed development. Two bids were received, that of the Muscle Shoals Hydro-Electric Power Company being deemed the most advantageous to the United States."

No action having been taken on this offer, a further study was undertaken by the Army Engineers, and the same plan recommended to Congress (House Doc. 1262, 64th Cong., 1st Sess.). It was recommended, however, in the last report that in view of the passage of Section 124 of the National Defense Act of 1916, action on the proposal be suspended until it was determined whether the Muscle Shoals plant would be utilized for a proposed nitrate plant.

After this country entered the war the Government did select Muscle Shoals as the site for the nitrate plants on account of the water-power possibilities there. There were various discussions between James Mitchell, the then president of the company, and Government officials as to the terms on which the Government should acquire this site and flowage lands owned by our company. There were differences of view between the Government officials and the company as to the value of the property and the price which the Government should pay, and as this difference might possibly have delayed the development, the company determined to donate the lands to the Government. From our letter of February 18, 1918, making the offer of donation, we quote:

"The properties in question represent a very heavy investment by our company and have occupied an important position in our plans for securing power for the future. For several years we have worked on plans for ultimately developing these water-powers as an integral part of the hydro-electric system which will be required by our companies to meet the needs of the communities which they serve. Much of this work was done in collaboration with the Army engineers looking toward a development in co-operation with the Government on some such plan as was favorably reported on by the Army engineers in House Document 1262, 64th Congress, 1st Session.

"I am advertizing very briefly to these features as I judge

from the several interviews which I have had with you and with other representatives of the Government that you are fully aware of what the company has done in preparation for the ultimate development of this water-power, and I believe you appreciate that it should receive consideration in the disposition of any surplus power not required for the needs of the Government.

"\* \* \* In times like these, however, such consideration must be secondary to the urgent needs of the nation to secure these properties immediately for the carrying out of the Government project for the production of war nitrates, and we have accordingly determined to donate our lands to the Government for this purpose. I have already given instructions to the company's attorneys for the preparation of the necessary deeds of conveyance.

"It is our understanding from you that the Government only desires to acquire the site at Dam No. 2 and adjacent properties, with flowage easement on such of our other properties as may be affected by this development.

"I need hardly assure you of the desire of the company to co-operate with the War Department to the fullest extent in placing at your disposition the benefit of all our engineering studies and records relating to the projected development."

The Secretary of War acknowledged the donation in this letter:

"February 20, 1918.

"Mr. James Mitchell, President,  
"Alabama Power Company,  
"Birmingham, Ala.

"Dear Sir:

"Referring to your letter of the 18th instant, addressed to Colonel Keller, in which you express the willingness of your company to donate to the United States certain properties and flowage easements needed for the proposed Federal power development at Muscle Shoals, I beg to acknowledge with thanks the company's generous and public-spirited action.

"The further steps necessary in regard to the matter will be given immediate attention.

"Very respectfully,

"NEWTON D. BAKER,  
"Secretary of War."

This site and other lands of the company had a value far in excess of the \$500,000 which we had spent in connection with its development. Our donation was at the time received with great applause by those who felt that by doing so we had hastened this development and had contributed to the upbuilding of the section. Possibly those who have forgotten should still bear in mind that throughout the entire period of this discussion our company has contributed more toward the Muscle Shoals development than any other enterprise or individual.

Immediately after our donation, the Government began the construction of Wilson Dam, expending about \$17,000,000 on the project. The Chief of Engineers, acting at the direction of the Secretary of War, wrote this company on April 2, 1921, inviting discussions looking to the completion of the project in some manner that would insure the Government a reasonable return upon its investment in the dam. We had a num-

ber of interviews with the Government officers, resulting in our offer of May 28, 1921—prior to the receipt by him of the Ford offer—in which we again expressed our interest in the development and stated that the project was an economical and profitable undertaking, that its completion was justified, and that we stood ready and willing to co-operate with the Government in any way desired looking to the completion of the project. The following is the concluding paragraph of our reply to the Chief of Engineers:

"If, therefore, authority is conferred by Congress to conclude a contract for the use of any part of the power by the power companies, we wish to assure you that we are ready to work out a mutually satisfactory arrangement looking to the completion of the dam and the disposal of such part of the power as Congress wishes to place in commercial use; desiring now, as at all times in the past, to co-operate in every way desired by the United States in working out the matter."

In response to a similar letter of the Chief of Engineers inquiring what arrangements could be made by which the Government would derive a reasonable return upon its investment in the power plant at Muscle Shoals, other power companies submitted a letter, which perhaps is the letter your correspondent has in mind, in the course of which it was recommended that the project be not completed, this letter being signed by the power companies in North and South Carolina, Georgia and Tennessee. However, our company differed with the others in the Southeastern States and submitted a separate letter under date of May 28, 1921, the concluding paragraph of which is quoted above.

It is interesting to note here that the demands for power in the Southeastern States have increased so rapidly since the submission of our offer in 1921 that even now we are finding it necessary to construct additional steam plant facilities to supply the demands on our system; and the other companies that formerly stated to the Secretary of War that commercial operation of the Muscle Shoals plants was not feasible are now securing under the temporary arrangement with the Government a part of the output of the Muscle Shoals plants. They have become convinced of the wisdom of the position we assumed at the inception of the present controversy and have joined with us in the effort to have the power distributed in the public service.

We have all along felt that Muscle Shoals would reach its maximum usefulness only when co-ordinated with the power demands of the very extensive territory covering several States within reach of the power from this source. The maximum value can be drawn from these Tennessee River possibilities only through their co-ordination with the power and reservoir opportunities on other rivers in Alabama and adjacent States now in process of progressive development. Such is the conclusion in the report entitled, "The Power Situation During the War," submitted to the Secretary of War in 1921, through the Chief of Engineers, from which we quote the following:

"150. It therefore appears that a broad and well-founded judgment would dictate that the Muscle Shoals development should be interconnected for exchange of power with the existing power systems of the Southern States, and that the interconnection and exchange should be arranged for without delay, so that future construction both at Muscle Shoals and elsewhere can be directed for the production of plants which will supplement each other for economy of construction and operation."

Your correspondent will also be interested in the independent review of the power situation in the Southeastern States by Prof. Thorndike Saville in his articles appearing in the MANUFACTURERS RECORD of April 21 and 28, 1927, in which he says:

"It is pertinent here to insert a brief note regarding the part that Muscle Shoals should play in helping to supply this future power demand. At the same time, this description will serve to illustrate the practical working of the interconnected power systems. As it stands today, Muscle Shoals

(installed capacity of 260,000 horsepower) can produce in an average year about 320,000,000 kilowatt hours at 55 per cent load factor. This is a pretty small proportion of the power required by 1930. Less than 5 per cent. However, in conjunction with the steam reserve plant at Sheffield (Nitrate No. 2, capacity 80,000 horsepower) an output of 650,000,000 kilowatt hours is possible on a 55 per cent load factor. If the plants are tied in with the interconnected power systems, due to diversity of load and operation of storage reservoirs elsewhere, these plants can operate on an 80 per cent load factor and will produce 860,000,000 kilowatt hours annually, an increase of 210,000,000 kilowatt hours, which is equivalent to adding an 80,000 horsepower hydro-plant. This increase would be due to the fact that while there was high water on the Tennessee and Muscle Shoals was producing to capacity, storage reservoirs elsewhere would be shut down and power would flow eastward over the interconnected high voltage transmission lines. When water in the Tennessee was low, the storage reservoirs in Alabama, Georgia and North Carolina would be opened and excess power generated by them would flow westward. Furthermore, local fluctuations in power demand can be met by transferring power from one end of the interconnected network to the other. This means that less standby capacity is required to meet peak loads on any one system, thus decreasing capital cost and increasing the load factor. This ability of the combined interconnected systems to absorb fluctuations in power demand is the only way that the full capacity of Muscle Shoals ultimate installation of 590,000 horsepower can be utilized economically."

Regarding the statement that the Alabama Power Company is making 1100 per cent profit on the price we are paying to the Government for electric power at Muscle Shoals: This statement arises no doubt because those who advocate Government ownership always state that we are paying two mills per kilowatt hour for power produced at Muscle Shoals and that we sell it for ten cents per kilowatt hour. This statement is far from correct. In the first place, our company buys a relatively small part of its total power requirements from Wilson Dam, depending upon load and water conditions. More than 90 per cent of our total sales, exclusive of any interstate business, is at an average rate of less than one cent per kilowatt hour, while the rates on some classes of service are as low as five mills per kilowatt hour. Very little electricity is sold at the highest step of the lighting rate and if the householder has a refrigerator, stove or other electrical consuming device of that kind, the rate will get down to an average of 3 cents or 4 cents per kilowatt hour. Furthermore, the difference between the price paid for power purchased and the price received from its sale by us does not represent profit to us. In addition to the amount paid the Government, there is our large investment in transmission lines, substations and local distribution systems, the use of which is necessary in delivering the power to our customers; there are very appreciable losses in energy between the point of purchase and the point of delivery; and the expenses of operating and maintaining these transmission lines, substations and distribution systems. These additional costs amount to several times the price paid for purchased power.

In addition, the Government reserves the right to cancel the arrangement at any time and the company cannot, therefore, depend on this as a permanent source of power supply and must provide facilities to take care of its load independently of Muscle Shoals. The company must have in its plants the capacity to serve its customers if the Government should discontinue the service at any time—and all the company can pay, therefore, is the cost of coal and labor saved by not operating its steam plants. The statement that our profit is 1100 per cent is one made by those who advocate government ownership, and as we have shown above, it is in no sense correct. It is simply an example of the lengths to which the public ownership advocates will go in distorting the facts.

We appreciate your writing us and giving us the opportunity to state our view of these matters.

THOS. W. MARTIN,  
President.

## Texas Granite Conquering Even in New York, in Competition With Eastern Granites.

By GEORGE D. ARMISTEAD, San Antonio.

It may be true as one of America's greatest authors wrote that, if one build a better mouse-trap than anybody else, the world will make a beaten path to his door; but, such beaten paths are usually a long time in the making. That is particularly true where the things desired, whether natural or manufactured, are in remote and almost inaccessible places. Some things compel speedy means of transportation to the outside world and catch the immediate attention of most of the human race; but, for the most part, the substantial things of this life are very slow in development.

To this latter class belongs Texas granite—styled poetically, but very truthfully, the "Stone Eternal." For, if there be on the earth's surface, or beneath, any substance which shall last forever, it is the contents of the great granite quarries in Gillespie, Llano and Burnet counties of this State. Sculptors, architects, contractors—builders of every sort—now acknowledge without stint that there is no handsomer or more durable material for any purpose from the making of a monument to the facade of a great memorial than any of the types of this Texas granite, which is found in inexhaustible quantities over the area contained in the three counties named. But, it has taken 42 years to bring designers of monuments, memorials and stone fronts to this conclusion.

Happily for the purposes of this article, the man who first discovered the real worth of Texas granite is still living and is still a notable figure in the granite industry of Texas. Frank Teich of Llano owns and operates the greatest enterprise devoted to the business of monument-building in all the Southwest. In fact, his name among monument builders is one to conjure with throughout the United States and in many parts of Europe. As a youngster, Mr. Teich learned the values and the differentiations of stones in his native Germany. Coming to the United States while still in his teens, he settled, like so many of his compatriots, among other colonists from the Fatherland in that belt of Texas lying to the northwest of San Antonio and to the West of Austin, and which was converted from a wilderness to one of the most wonderful belts of the Lone Star State by John Meusebach, Prince Solms and the hardy men and women who came with them, and their sons and daughters.

Frank Teich cut and polished the first slab of Texas granite ever used in the construction of a building. That occurred in 1885, in San Antonio. The stone was one of many chiseled

out of Bear Mountain, four miles north of Fredericksburg, in Gillespie county, and was freighted by ox team nearly 80 miles over a route which must have tried the patience of the freighter more than it did that of the oxen. Incidentally, a splendid, modern highway today marks nearly the exact route the oxen took. Mr. Teich's business at San Antonio induced him to obtain possession of Bear Mountain in 1887.

In 1888, Mr. Teich sold Bear Mountain to Nagel Brothers, who have since owned and operated this mine of potential wealth. The quality of Bear Mountain granite cannot be better described than by the simple statements that exhibits quarried by Nagel Brothers won the bronze medal at the St. Louis World's Fair in 1904, and first prize for stone exhibits from any State at the Philadelphia Sesqui-Centennial. In brief, the stone which Mr. Teich almost rejected for his new discoveries at Llano became the headstones of the corners at both these notable expositions.

Bear Mountain comprises a surface at its base equalling 82 acres and is approximately 400 feet high. Drills sunk at its base were still biting into the same kind of granite 107 feet below. Somebody with a taste for higher mathematics and who made careful computations after an actual survey of Bear Mountain has estimated that it would require 100 trains, each of 100 cars, 100 years to haul that huge obstruction away.

Bear Mountain granite is red and is described by those who know—as the judges at St. Louis and Philadelphia wrote into the records—to be of as fine and as durable texture as may be found in any granite ever discovered in any part of the globe. In geological terms, it is called a "hornblende." It is entirely free of iron and polishes into a surface which is beautiful to see and soothing to feel. This granite has been used extensively in the erection of many buildings throughout southwest Texas, in monuments and headstones. It was selected after sharp competition as the material for the War Memorial which Galveston erected to those of its sons who did not return from France.

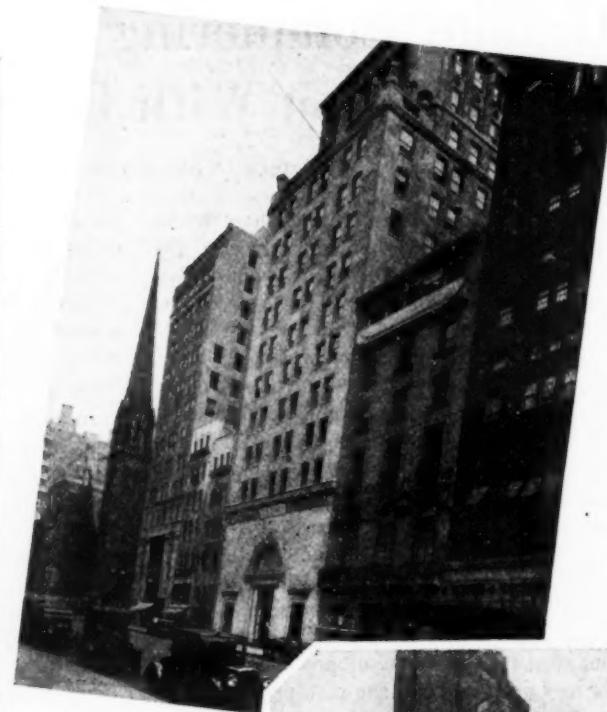
There is at present much discussion, supported by much energy, looking toward the building of a railroad intended to serve the territory northwest of San Antonio and northward to some traffic center like Wichita Falls. Nagel Brothers at Fredericksburg and every granite and marble quarry at Llano are working for the consummation of this move. Char-



VIEW OF BEAR MOUNTAIN, FREDERICKSBURG, TEXAS, FROM A HILL A MILE AWAY.



Aeolian Building



Steinway Building



New York Edison Building



Bank and Office Building, 269 Madison Avenue

**Texas Granite Enters Into the Construction of Each of These New York Buildings.**

ter for the proposed line already has been granted by the Secretary of State, with Ralph W. Morrison, president of the San Antonio and South Texas Chambers of Commerce, capitalist and one of the foremost business men of the Southwest, as its executive. With that new railroad built, the granite industry of both Gillespie and Llano counties will, in the judgment of everybody interested, be placed on the same favorable level as regards transportation to market now enjoyed by Burnet granite. And when it is remarked that Granite Mountain, hard by the Colorado at Marble Falls, meets Rhode Island and Vermont in competition inside the limits of New

York City and wins over both, enough will be known to visualize just what the Texas stone industry may be expected rapidly to become.

There is only one active quarry, that of Nagel Brothers, in Gillespie county. There is only one active quarry, that at Granite Mountain, owned by G. G. and Thomas Darragh, in Burnet county. In Llano county, there are five, all struggling because of inadequate transportation—because they are located off the Southern Pacific lines—that spur running from Austin to Llano.

All the quarrymen were jubilant when I visited them,

because of a decision by the Interstate Commerce Commission reducing interstate rates on all shipments from Fredericksburg, Llano and Marble Falls, alike. This was an achievement they had worked for at least five years. The new rates became operative December 5 and are expected to make many a change in the quotations Texas granite men will be



BALANCED ROCK ON BEAR MOUNTAIN.

At Fredericksburg, Texas. A granite base capped with a geological freak of the same material.

able to offer builders in outside territory after that date. However, while the bulk of the stone going to market from Burnet county is employed outside the State, most of the business done by the quarries in Gillespie and Llano counties is inside Texas and, therefore, not affected by the ruling of the Commission.

There is not so much difference, even to the eyes of a geologist, in these granites from three different counties, with the exception that, while Burnet granite and Fredericksburg granite are similar, Llano county can furnish at least a dozen different species of this stone and at least one said to be the only one of its kind known. This is the celebrated garnet, a stone as hard as steel, polishing into a thing of beauty when finished with the tints of Texas bluebonnets, reds and browns. Nowhere else, it is claimed, has such a granite been discovered. No real quarry of this granite has been located so far, though Frank Teich, Texas' granite pioneer, spends much of his time trying to find it. He expressed the opinion that a deposit of garnet granite of sufficient proportions to be quarried for general commercial purposes will yet be found and it is his chief ambition today to be the discoverer.

Garnet granite has been used, principally by Mr. Teich in the testimony of the love of the living for the dead. It is entirely too expensive to be even quoted for general building purposes. There is a romance about Mr. Teich and granite; there is another about the Nagels and Bear Mountain, and there is a third about the Darraghs and Granite Mountain. After selling Bear Mountain to the Nagels, Mr. Teich became a granite prospector, traveling by horseback over the rough

trails along the Colorado and Llano rivers, riding into territory where granite deposits ceased and then returning to the spots where granite was visible even to a layman's eye.

There is, perhaps, in all the world no statelier or handsomer structure than the Capitol of Texas at Austin. It was the Granite Mountain granite, given free as an advertisement of Granite Mountain, which first attracted the general attention to the quality of Texas granite as a whole and to that of Burnet county especially. Mr. Teich was foreman of a granite crew during the construction of the State Capitol in 1883, and until that magnificent edifice, which is at once the pride and the glory of every Texan, was finished.

Mr. Teich from his holdings mined the material which entered into the building of the City Hall at San Antonio—a handsome structure just now being replaced because of its smallness. His granite, also, went into the building of the Yoakum residence in San Antonio, still considered one of the handsomest homes in that city. But, for many years, Mr. Teich has confined his operations to the making of monuments. He has learned of immense marble deposits, as well as granite fields. He has quarried dolomite marble, rich in its varicolored hues, and employed this in marking the resting



35-STORY NEW YORK CENTRAL BUILDING IN WHICH 10,000 CUBIC FEET OF TEXAS GRANITE IS TO BE USED.

places of those who have gone before. In this particular field he has been remarkably successful. Not only a quarryman, he is a sculptor as well, and monuments and mausoleums designed by his hands stud cemeteries from Llano to New Orleans and from Laredo to Kansas City. No story about Texas granites or Texas marbles could be properly written without Mr. Teich filling considerable part of it. The industry knows no better friend, or more active one. His one need today,

according to his own account, is another railroad. With that, he asserts, the quarrymen of Llano county will be able to come into successful competition with their competitors from New England to Los Angeles.

Granite Mountain, a towering pile of pink granite, is located 14 miles west of Burnet and one mile out of Marble Falls. Incidentally, Marble Falls is to be a sort of headquarters for the greatest hydro-electric project in half a dozen States of the Southwest. Unless fully matured plans go astray, the Syndicate Power Company will build five dams across the Colorado River, with Marble Falls as a center of operations, from which it is expected to create 122,000 horsepower of electric energy for industries hundreds of miles away. To this should be added, at this point, the fact that the Central Power and Light Co., with high voltage transmission line into Fredericksburg, is in a position to supply energy for the Bear Mountain development whenever required. Not many more things could depend on the coming of a new railroad. So far, Mr. Teich is the only operator in stone to avail himself of the benefits of electric energy.

Following completion of the Texas Capitol, the Darraghs, who bought the Mountain in 1893 from Norton, Westfall and Lacey, interested United States Army engineers in the use of granite in the making of jetties along the Gulf coast of Texas from Sabine Pass to Port Aransas. Probably, 2,000,000 tons have been used in work of this sort. At least 200,000 tons of Burnet granite went into the erection of Galveston's famous sea wall.

But the reputation of Burnet granite does not rest alone on jetties, seawalls or even on the Texas State Capitol. In New York city there is now under construction on Park

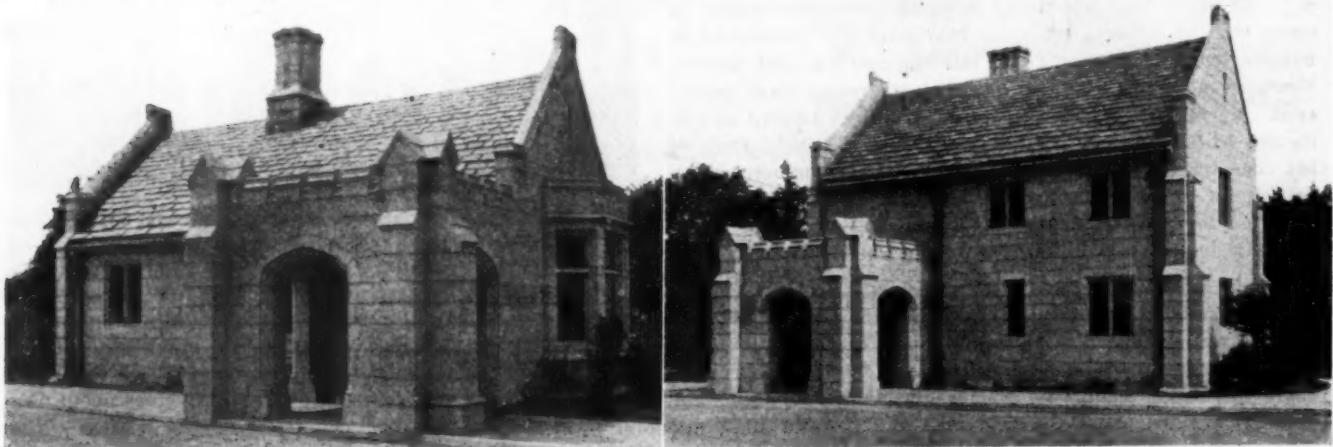
avenue the great New York Central office building, running from 46th to 45th street and extending 35 stories into the air. The architects for this huge structure are Warren and Wetmore, and the contractors, James Stewart and Company, Inc., both of New York. An accompanying illustration gives an idea of its size. The building exterior will be of Texas granite and Indiana limestone up to the fourth story, the contractors for the granite being Edward J. Davey, Inc., of New York.

Several other buildings in New York city in which Texas granite has been used are shown in the views on a preceding page. Notable among these are the Steinway Building, which was awarded the first prize for new buildings in 1925, and the Aeolian Building in 1926. Mention should be made also of the use of Burnet granite in the Roosevelt Memorial and in a wing of a building for the American Museum of Natural History.

From Granite Mountain to New York city is quite a distance, even as Texans measure distance; it is probably ten times as far from Marble Falls to Gotham as it is from the Vermont quarries down to the Metropolis—twenty times farther than Stony Creek or Rhode Island. Wherefore, it may appropriately be said that Burnet granite has won its spurs, medals and all, in the sharpest field where granites can meet. And when one recalls that Fredericksburg granite acquired blue ribbons in such world-wide struggles as St. Louis and Philadelphia afforded, no builder and no student of stones should longer have any doubt about the fineness of the material composing a Texas industry which, though 42 years old, is yet only an infant for the reasons given, and which in the fullness of an early time promises to add as much to the luster of Texas as either the wide expanse of its plains or the whiteness of its cotton fields.



WAR MEMORIALS OF TEXAS GRANITE.  
In Bronx County, New York, and at Woodlawn Heights, New York City.



COTTAGE AND LODGE OF TEXAS GRANITE, GREENWOOD CEMETERY, BROOKLYN, N. Y.

## Cotton Men Advocate Crop Reduction and Better Methods of Financing Surplus.

By THOMAS EWING DABNEY.

New Orleans, La., January 12.

The Southwide Cotton Conference held under the auspices of the American Cotton Association in New Orleans this week attacked the cotton price problem of the South through resolutions looking to the reduction of acreage and the organization of financial institutions to carry the surplus production by means of greater advances to farmers than is now the current practice of banks.

Harry D. Wilson, commissioner of agriculture of Louisiana, declared that acreage reduction is "the bunk," and that the answer is, and by right ought to be, no reduction in production, but increase in consumption. "Let's go on record as favoring the use of cotton products in every way possible," he said. Dr. Tate Butler of Memphis characterized the crop finance corporations organized in various States in 1926, as a "political gesture," while N. C. Williamson, a Louisiana planter, said he saw no reason for organizing another finance corporation.

The resolution calling on Southern bankers to assist in the organization of a cotton financing corporation to give farmers full value "and so enable them to withdraw enough cotton from the market to make a significant and substantial difference," which was passed, is as follows:

"Whereas, it is a well recognized fact that the South's great cotton crop does not often bring its real value, because of no well organized effort to market the crop in accordance with well established principles applied to the marketing of products of industrial enterprises; and,

"Whereas, the cotton crop of 1926, because of a supposed surplus, sold for several hundred million dollars less than its real value, and the small crop of 1927 is selling below the price justified by the natural laws of supply and demand, thereby causing a great loss to the cotton producers and interests dependent upon cotton; therefore, be it

*"Resolved by the Southern Cotton Conference now assembled at New Orleans,* That we take immediate steps to organize and put into operation at the earliest possible date a cotton financing corporation with sufficient capital to finance and hold off the market any temporary surplus of cotton produced in any year, in order to stabilize prices and make the crop bring the average cost of production and a reasonable profit on the capital and labor invested;

*"Resolved, further,* That it is the sense of this meeting that the bankers of the South, because of their financial ability and thorough organization, should take the lead in this movement and show their willingness to go to the limit of their financial and business ability in organizing the cotton financing corporation to make the cotton crop bring its real value."

Other resolutions urged the restriction of acreage in 1928, with the smaller area more intensively cultivated, and also the planting of more food, feed and legume crops.

The meeting also adopted a plan, submitted by Colonel Harvie Jordan of Greenville, S. C., under which each county would withdraw a certain percentage of the cotton surplus from the market, and hold this until the price turns favorable. The plan contemplates the reduction of acreage in the years after the surplus.

Colonel Jordan proposed that counties in which cotton is raised form banks with a cotton planter as head and a banker as vice-president, these associations to loan money to the farmers on warehouse receipts on their cotton. In this manner cotton may be retired when there is a surplus, he said.

J. S. Wannamaker, president of the American Cotton Association, is to appoint a committee of one member from each cotton-producing State, to meet later and draw up the final plan. Also, he read a letter from Henry Ford, in which the

automobile manufacturer said that the plan "means an increase in the price of cotton" and that he would be forced to use other material if the price went "high enough."

In his opening address, Mr. Wannamaker urged the necessity for the Government to take action making it possible for the agricultural producer to rehabilitate his stricken industry, and maintain it upon a profitable basis by providing the machinery through which the producer can warehouse and finance his surplus crops.

"The Government machinery should provide only for storing and carrying the surplus," Mr. Wannamaker added. "When this is done, the grower should be required to execute a binding contract to reduce his acreage and plant the land to other crops."

Frank B. Hayne, former president of the New Orleans Cotton Exchange, expressed sharp criticism of the Government's cotton crop forecasts.

A resolution advocating that Muscle Shoals be leased by the Government to provide power and manufacture nitrates was defeated. The conference took the stand that this was a political issue, in which it could not safely mix.

Mr. Wannamaker was re-elected president; Joseph O. Thompson of Roba, Ala., was re-elected vice-president, and Colonel Jordan, chairman of the better farming and weevil control committee. Mr. Jordan and Mr. Thompson also were appointed on the legislative committee. Although the conference was planned to last two days, it completed its deliberations in one day.

### Telephone Expansion by the Bell System.

A summary of developments in the Bell System in 1927, as compiled by the publicity department of the American Telephone and Telegraph Company, New York, indicates that great progress was made in extending the range and uses of the telephone. Commercial telephone service between New York and London became a fact; new aerial wire lines connected the Bell system directly with all the more important Canadian telephone systems, and a new telephone line brought the principal cities into voice communication with the United States. Also, the use of long distance telephone wires for transmission of pictures was extended and the first public demonstration of the television apparatus was a feature. The work of constructing practically storm-proof distance cable lines was vigorously advanced.

In a marked increase the companies in the United States transmitted an average of 72,500,000 conversations daily, an increase of approximately 2,500,000 over the average number per day in 1926. On a per capita basis, the average number of conversations was 205.8 yearly in 1927. The total investment in telephone plant equipment approximated \$3,500,000,000 at the end of 1927, of which about \$3,100,000,000 represented investment in the Bell system.

### Acquires Sulphur Rights on 500 Acres.

Boling, Texas.—The Texas Gulf Sulphur Company, Gulf, Texas, acquired sulphur and surface rights on more than 500 acres of land near Boling at a cost of nearly \$1,000,000. Tests of the sulphur deposit have been made and plans include erection of a large plant. Mining operations are expected to begin within a few months.

### \$1,000,000 Apartment Building for Baltimore.

The Warrington Apartments will be erected in the Roland Park-Guilford section of Baltimore, at a cost of approximately \$1,000,000, by the Gillet Realty Corporation, Baltimore, after plans and specifications by Wyatt & Nolting, local architects. The structure will be 12 stories and basement, fireproof, limestone and brick construction and contain 50 apartments, the



WARRINGTON APARTMENTS, BALTIMORE.

larger ones to consist of entrance hall, living room, library, dining room, pantry, kitchen, four master bedrooms communicating with bath, servants' hall, two servants' rooms and bath. The smaller apartments will consist of entrance hall, living room, dining room, pantry, kitchen, two master bedrooms each with bath, maid's room and bath. Wood-burning fireplaces will be provided in the living room and library of the larger apartments and in the living room of the smaller ones.

Ten of the apartments will be provided with terraces and porches and those on the first floor will have private gardens. The building will be equipped with two guest elevators and two service elevators. Storerooms and additional servants' quarters will be located in the basement. The Consolidated Engineering Company is the general contractor and financial details are being handled by Gillet & Co., both of Baltimore.

### Hardwood Manufacturers Combine With Pitch Pine for Export.

Recent conferences of manufacturers of hardwoods interested in export trade have resulted in 17 firms deciding to take advantage of the Export Trade Act and to become identified with the American Pitch Pine Export Company of New Orleans, La., which will put such manufacturers in contact with foreign markets. The manufacturers in this movement are as follows: Louisiana Central Lumber Company, Clarks, La.; Pearl River Valley Lumber Company, Canton, Miss.; Kirby Lumber Company, Houston, Texas; Hillyer-Deutsch-Edwards, Inc., Oakdale, La.; Tremont Lumber Company, Rochelle, La.; Pascagoula Hardwood Company and Eastman-Gardiner Hardwood Company, both of Laurel, Miss.; Louisiana Long Leaf Lumber Company, Fisher, La.; Ange-

lina Hardwood Company, Ewing, Texas; Kurth-Zeagler Lumber Company, White City, Texas; Martin Wagon Company, Lufkin, Texas; Lamar Lumber Company, Inc., Bogalusa, La.; Peavy-Moore Lumber Company, Frost Lumber Company and Weaver Brothers, all of Shreveport, La.; Adams-Newell Lumber Company, Deemer, Miss., and Homochitto Lumber Company, Bude, Miss. These companies have a combined annual production of 350,000,000 feet. Roger E. Simmons, secretary of the American Pitch Pine Export Company, says that combining pitch pine and hardwoods in selling and shipping augurs well for both industries.

### \$6,242,804 Budget for Houston Lighting and Power Company.

Houston, Texas.—The budget of the Houston Lighting and Power Company for 1928 will involve an expenditure of \$6,242,804, about \$500,000 more than was expended in 1927. The company's program will include: Turbine for deep water plant, \$3,000,000; substations and improvements, \$363,841; sub-station and transmission transformers, \$127,000; communication, \$98,000; improvements to transmission system, \$195,089; improvements to distribution system, \$352,779; improvements to sub-station feeders, \$401,000; improvements of power stations, \$254,845; improvements and extensions to underground system, \$255,000; stores and shop buildings, \$406,500; new meters, \$140,000; new transformers, \$140,000; short line extensions, \$200,000; street lighting equipment, \$75,000, and miscellaneous, \$233,750.

### Itemized Costs in Construction.

In view of the tremendous building work in the South, figures from the Department of Labor giving the proportionate costs in construction operations are not without interest. According to these figures, labor constitutes 62 per cent of the cost of building the average dwelling house, while materials represent 38 per cent. Further, the foundation and masonry work represent 36 per cent of the total cost of the completed job, the foundation being the largest single item of construction expense. Carpentry, including labor and materials, is the second largest item, at 29 per cent. Plumbing fixtures and installation are reported at 10 per cent of the entire cost; heating plant, 9 per cent; hardware, 8 per cent; painting and materials, 6 per cent, and lighting fixtures and installation, 2 per cent of the job.

### Contracts on \$500,000 Bank Building.

Lake Charles, La.—General contract was awarded at \$320,000 to the Underwood Contracting Corporation, New Orleans, for the Calcasieu National Bank Building, to cost about \$500,000 complete. Contract for vaults was awarded to the Mosler Safe Company, Hamilton, Ohio; Burglar alarm system, McClintock Company, St. Paul, Minn., and for elevators to Otis Elevator Company, New York. The structure will be three stories, of reinforced concrete and limestone, with concrete foundation, terrazzo and tile floors and Barrett roof. Favrot & Livaudais, Ltd., New Orleans, are architects.

### Wages in Bolshevik Russia.

Wages in Russia under Bolshevik rule are thus disclosed by the official organ of the central statistical department of the Union of Soviet Socialist Republics, the figures being averages for March, 1927: Coal miners, \$31.35 a month; iron and steel, \$33.82 a month; cotton, \$27.32, and wool, \$27.61 a month; bricklayers, \$1.21 a day; carpenters, \$1.12 a day; plumbers, \$1.42; plasterers, \$1.15; painters, \$1.20; laborers, 72 cents.

## Department of Commerce Reports New and Better Credit Conditions in South.

By GEORGE H. MANNING.

Washington, January 14.

The present South is based on a new credit system. Perhaps the most far-reaching and encouraging of the vast economic changes now taking place in the South is its gradual establishment on a cash or sound short-term credit basis, replacing the old long-term credit system for current needs.

The "supply merchant" of the Old South, who let the farmer have his food, clothing, feed, fertilizer and, perhaps, farm implements "on time" and took mortgages on his crops, is passing. In his place is coming a sounder method of financing the farmer's running expenses, and with it a sounder method of financing the Southern merchant. The banks of the South, too, are profiting by the shift, and are now on a more stable and prosperous basis.

This is revealed in a commercial survey of the Southeastern States just completed by John M. Hager of the Department of Commerce. While the survey covers only North and South Carolina, Georgia, Florida, Alabama and Eastern Tennessee, the same credit system prevailed throughout the agricultural South for many years and the same change is taking place all over the South.

The evils of the old credit system are listed as follows:

The merchant who "carries" the small landowner or tenant farmer can exercise too large a measure of control in the selection of goods which the customer buys.

The merchant himself cannot profit enough under such a credit system.

The merchant is often also the buyer of the farmer's crop, and thus can determine to a disadvantageous extent the price the farmer gets for the crop.

As the Southern merchant usually accepts mortgages only on the cotton and tobacco crops, this system is not conducive to diversification or to restriction of the crop when there is an oversupply, lowering the prices.

Excessive interest is in reality charged on such advances to the farmer, sometimes amounting to 60 per cent per annum; whereas, the legal rate of interest is 6 to 8 per cent, these interest rates being set by higher prices on articles bought "on time."

The merchant, in turn, has to pay high interest charges, because he has either to borrow money from the banks or pay higher prices to the wholesaler or jobber who "carries" him.

This system has been on the decline since the Federal Reserve Act went into effect in 1914, but it took the 1921 post-war depression to bring about a conscious effort toward placing business on a new cash relationship between distributor and consumer.

Recounting the history of this change in the credit system of the South, Mr. Hager says:

"The year 1920 marked the beginning of a new era in the commerce of the Southeast. The succeeding period introduced a change in relations between wholesaler and merchant, and merchant and consumer. They had all lived on credit—the wholesaler performing an unusually essential and important service to the small merchant doing a heavy supply business, with settlements once or twice a year; the merchant acting in a similar capacity to the large agricultural population.

"The merchants at the crossroads and in the little towns followed the habitual custom of going to the trade centers in the spring and in the fall and arranging for a year's credit on personal notes.

"The period following 1916 was one of good cotton prices and general agricultural prosperity. Beginning with 1917, prices of merchandise went up; cash became plentiful, and credit loose. This continued, with the merchants clamoring for goods at any price, until 1919. During this time buying was stimulated by the establishment of many cantons.

filled with troops drawing regular monthly pay, which was freely spent. These men came from other sections of the country as well as the South, introducing a demand for commodities consistent with past habits and standards. The resultant increased and varied demand and interchange of ideas were effective in changing merchandising methods, and this change was further aided by the return of native white and colored troops from Europe and from Northern and Western camps.

"In 1920 deflation set in, prices fell and merchants became panicky, some throwing stocks on the market, taking their losses immediately, while others refused to reduce prices in proportion to replacement cost. Business, in consequence, became demoralized in the region, as everywhere else. The distributors were also confronted with having large stocks of high-priced merchandise on their hands, the forced unloading of which necessitated the writing off of considerable losses at the time.

"Those retailers who did not take their losses soon enough found themselves in worse condition during 1921 and 1922, and many failures ensued. Some unscrupulous merchants took advantage of the situation by going into bankruptcy, refusing the help and extension of time offered by creditors who wanted to save them and, of course, protect themselves. In many instances, even honest dealers who tried to weather the storm—and sacrificed themselves in the attempt to work things out—were forced into bankruptcy by the general conditions.

"As a result, credit was at a premium, and the wholesaler, profiting by this experience, was inclined to refuse to do business with merchants operating on a long-time credit basis. This period thus marks the passing of the historic 'supply' and 'time' merchant of the cotton area, a step in development which is gradually being felt in the whole financial and commercial structure.

"The decline of the 'time merchant,' who was the important factor in the financial structure of the region, was inevitable, because the basis of credit which had formerly been accepted proved to be unsound and impracticable in the face of changing conditions.

"As usual in such cases, these 'lien merchants' did not realize the drift of events until the credit which they had extended proved to be worthless, thus bringing about widespread bankruptcy. Most of those who have survived have modified their methods and their credit practices, having found that continued extension of credit is possible only on the basis of sound business, backed up by such security or collateral as is accepted by the conservative banker. Many farmers are now trying to put their farms on a current cash basis—an exception before this time.

"The farm loan banks, intermediate credit banks and local financial institutions are facilitating this movement by making possible the placing of mortgages on farm property and diversified crops, at legal interest rates, a procedure which was not common prior to recent years. By agreement, the borrower is enabled to obtain funds at intervals, as needed, permitting payment of cash for purchases, and encouraging the working out of debt and the building up of surplus. In addition, it gives freedom to purchase at cash prices, where and what is wanted, instead of having to pay extra, over and above a fair interest, for special services and credit.

"The effect is to break up the double function of the merchant as a supplier of merchandise and as banker and, to the extent that the newer practice is being carried out, to put the farmer on the same financial basis as any other business man, enabling him to borrow from the banker and purchase where it is most advantageous and convenient."

Mr. Hager points out that the "time merchant" who "carried" the farmer, filled a need—although at a great cost to himself, the farmer and the commercial progress of the South—when no other credit agency was available, but that his passing opens the way for new and constructive merchandising and financing.

The Federal Reserve system was a forward step in putting

the South on its feet financially, Mr. Hager declares. The South was made a self-sustaining credit unit, as far as current needs went, and local banks were helped to take care of community needs at better interest rates to farmers and merchants. Individual banks have grown, with increased capitalization, commercial and savings deposits and volume of loans. The banker is aiding the warehousing of cotton and helping stabilize cotton prices by relieving the necessity of wholesale dumping of cotton at unfavorable prices at the ginning period.

"Also," Mr. Hager adds, "the banks are to a degree enabling the agricultural classes to borrow cash at nominal interest rates at appropriate intervals through the cotton-growing season, thus permitting the purchase of current needs for cash prices where it would be most advantageous, in contrast with being solely dependent upon a single merchant charging 'time prices.'"

The "Progressive Farmer" made two investigations which reveal the effects of the practice of buying "on time." The farmer gave a crop mortgage, which bound him by necessity to one dealer, who had the sole discretion of determining interest charges. The prices of eight articles reflecting representative purchases—corn, flour, lard, sugar, molasses, hay, meal and oats—were used in arriving at the difference between cash prices and time prices in the different cotton-growing States. The average increase for time prices over cash prices proved to be approximately 20 per cent. Assuming that four months is the average time that the accounts run, this would represent an annual interest rate of 60 per cent for the privilege of term credit as a charge for risk and credit extension, as against a legal interest rate of 6 to 8 per cent.

In addition to this tremendous interest rate charged against the poorest and most helpless class, the credit conditions have been so burdensome that the farmer's purchasing power has been decreased and it has been difficult for him to accumulate a surplus. A prominent banker declares that by the time a farmer has finished paying for a mule bought on time, he has paid 75 per cent more for it than it should have cost him.

The North Carolina Tenancy Commission discovered, in a survey in that State, that only 24.2 per cent of the tenant farmers did a cash business, as compared with 62.9 per cent of the landowners, and that 81 per cent of all credit was furnished by merchants, 11.1 per cent by landlords, 6.4 by bankers and 1.6 per cent from neighbors and relatives. That was in 1922, and showed how, even after the movement toward a cash system and toward financing by banks had progressed considerably, the farmer still was unable to put his business on the more advantageous cash basis.

The increasing industrialization of the South has aided the progress toward a revision of the credit system. The establishment of factories, the discovery of oil wells and mines, all tend to bring more cash into the region. Workers receive weekly pay and operate on a cash basis, giving the merchants enough cash to finance larger and more varied stocks.

The South will be a better market for all kinds of goods, and will be in a position to finance not only its current needs, but also its capital investment, on a more advantageous and self-sustaining basis, when the shift to the short-term and cash credit system becomes more nearly universal throughout the area, Mr. Hager believes.

#### Oklahoma City Sells \$1,700,000 School Bonds.

J. G. Sterley of the Board of Education, Oklahoma City, advises that the board has sold \$1,700,000 school bonds to the American First Trust Company of Oklahoma City at par and premium of \$3930. The bonds will bear an interest rate of 4½ per cent and will be issued in denominations of \$1000.

#### \$100,000,000 Spent in Oil Well Drilling in Texas Last Year.

Austin, Texas, January 14—[Special.]—More than \$100,000,000 was spent in drilling oil wells in Texas in 1927, according to the oil and gas division of the Railroad Commission. The total number of wells drilled was 8739, of which 5103 were producers and 3636 dry holes. Total number of applications for permits to drill was 9027, to shoot 2434, to plug 3976, plugged 3533 and gassers 398.

Validity of the statute which empowers the Texas Railroad Commission to make and enforce conservation rules governing the drilling of oil and gas wells is involved in the case of the Oxford Oil Company and others against the Atlantic Oil Company, now pending in the United States Circuit Court of Appeals at New Orleans, and in which a motion for rehearing has just been filed.

This is a step to take the case to the Supreme Court of the United States. It was in this case also that the complainants asked for damages aggregating \$8,000,000 from opposing oil companies and the members of the Railroad Commission and heads of the oil and gas division. The judgments were a victory for the State.

#### Move Airplane Factory from San Diego to St. Louis.

St. Louis, Mo.—The B. F. Mahoney Aircraft Company of San Diego, Cal., manufacturers of the Ryan airplane, will remove its factory from San Diego to St. Louis, and plans soon to begin the construction of the first unit. This will cost \$50,000 and will be ready for operation by spring. The initial output will be about 9 planes per month, but will be increased to 18 monthly. A Missouri corporation with \$500,000 capital stock will be organized with Mr. Mahoney as president.

#### \$500,000 Office Building Contract.

Austin, Tex.—Ernest Nalle has awarded contract to Walsh & Burney, San Antonio, to erect a 15-story, \$500,000 office building here, 161 by 88 feet, reinforced concrete faced with stone and brick, tile walls, granite wall base, tar and gravel roof, corridors finished in marble and terrazzo and tile floors. It will be equipped with three elevators and will provide a garage in the basement. There will be six stores on the first floor. Endress & Cato are the architects and Robert J. Cummins, structural engineer, both of Houston.

#### \$1,000,000 for School of Government.

Washington, D. C.—A gift of \$1,000,000 has been made to George Washington University, this city, by the Supreme Council, Scottish Rite Masons of the Southern Jurisdiction, for the establishment of a school of government. The disposition of the fund will be in the hands of the University trustees and the school is expected to open next fall.

#### \$317,000 Contract on Houston Market Project.

Houston, Texas.—The city of Houston, J. C. McVea, city engineer, awarded contract to Don Hall, Houston, at \$317,682, for the substructure of the farmers' market on Buffalo Bayou and for straightening a bend in the bayou, the channel to be walled with concrete. A bond issue of \$400,000 is available.

The city of Tampa, Fla., shipped 1,364,994 long tons of phosphate in 1927, the largest year's shipments in the history of the port.

## North Carolina Farm Outlook Improves.

By F. H. JETER, Agricultural Editor, North Carolina State College of Agriculture and Engineering.

Out of the apparent discouragement of last spring has come improved conditions in agriculture throughout North Carolina, and the outlook for 1928 is very good. The open fall permitted the breaking of land for this year's plantings and the sowing of thousands of acres of legume cover crops and winter grains. In addition to being up with their work and in better condition to meet the spring rush than in many years, farmers of North Carolina were not so badly off in financial returns for 1927.

There now is no boom condition, as at the close of the Great War, but steady, substantial prosperity, based on actual values. The consolidation of rural schools goes on apace and the ribbons of concrete are gradually unwinding, permitting of better marketing and closer social contact. These concrete roads proved a factor in marketing both the early truck and the peach crop this year and will be used more and more as farmers equip themselves with trucks and other modern machinery. Waterworks, lights, silos, good barns, pure bred cattle of all kinds, good automobiles, good schools, and happy children may be found today about over the country-side of North Carolina, and the new year brought a happy greeting.

It was with crops, as usual, that the farmers of North Carolina made their greatest progress in 1927. The State produced 468,000,000 pounds of tobacco, an increase of 82,000,000 pounds over 1926, and the 468,000,000 pounds were sold for 25.8 cents a pound. The market was delayed in opening; the rush on the opening days overwhelmed the warehousemen and buyers and much valuable tobacco was sacrificed at a low price. After this first hysteria, more orderly marketing caused a strengthening in price.

North Carolina reduced its cotton acreage about 10 per cent last spring and the boll weevil, boll worm and other insects reduced the bales harvested about 30 per cent under the crop of 1926; yet, the final value of the crop was 10 per cent more than the large crop of 1926. The State produced 857,000 bales in 1927, as compared with 1,213,000 bales in 1926, but the price averaged around 19 cents, as compared with about 11 cents in 1926.

One of the most significant steps taken in 1927 was the increase of over 200,000 acres planted to tame hays and the heavy harvesting of wild hay crops during the year, showing inclination toward the dairy barn. The acreage and harvest of peanuts were also increased in 1927 and prices for the shelled nuts remained about 4 cents a pound. The actual harvest was 210,367,000 pounds. Also, the growers of eastern North Carolina harvested over 7,000,000 bushels of early Irish potatoes, producing an average price of \$1.50 a bushel.

The strawberry crop was an unusual success, bringing in new farm equipment, new homes and new hope to the section centering about Duplin and Columbus counties. The crop of May peas was a financial success, due to increased prices at the close of the season. The peach crop of the Sandhills was short, but very successful from the standpoint of prices. Sweet potatoes were more abundant, and the acreage and yield of soybeans was increased over 1926.

During a six months' period, over \$500,000 worth of fat hogs were shipped to the markets of Richmond and Baltimore and many others were sold to local butchers and packing plants. Hog feeding definitely became a part of the farming practice during the past year. Records show that over 3,000,000 pounds of live poultry were shipped in cooperative carlot shipments, at 20 to 25 cents a pound.

Finally, in 1927, North Carolina definitely began to turn to dairying as a source of steady farm income, and in a

campaign to increase the number of pure bred cattle in the State 1483 pure bred cows and bulls were brought in. In other forms of livestock, there was an increased interest in farm flocks of sheep and some encouragement to the beef cattle business. Both of these farm industries are on the upgrade now and those who know say that further expansion will be made in 1928.

### \$500,000 Memphis School Contract Awarded.

Memphis, Tenn.—General contract has been awarded at \$393,000, to the Wessell Construction Company, Memphis, for the erection of the \$500,000 Crockett Technical high school here. Contracts for heating and ventilating, plumbing and wiring have not been awarded. The building will be 3 stories and basement, reinforced concrete with stone trim, built-up roof, steel trusses and equipped with steam heat. It will accommodate 1000 students and will have an auditorium to seat 1300. Hanker & Cairns and T. Wallace, both of Memphis, are the architects.

### Record Year in Real Estate Financing.

First mortgage real estate financing in the United States in 1927 amounted to \$1,016,289,600 and established a new high record, according to the building and economic research bureau of the American Bond and Mortgage Company. The figures showed an increase of 12 per cent of 1926, the previous record year. Approximately \$3,524,564,450 in real estate mortgage securities have been offered in the last nine years to finance building construction, while, in addition, insurance companies and banks at the end of 1927 held loans estimated at more than \$10,000,000,000 secured by real estate mortgages.

### Open Shop Conference at Jacksonville.

Announcement of the twelfth semi-annual meeting of the American Plan Open-Shop National Conference, at Jacksonville, Fla., February 2, 3 and 4, is made by J. B. Landers, secretary-manager of the open shop division of the Oklahoma City Chamber of Commerce. This session is expected by the officers to develop into "the outstanding and most far-reaching ever held in the United States for consideration and solution of industrial problems relating to employment relations between employer, employee and the public." Information regarding the conference may be obtained from A. C. Rees, Kearns Building, Salt Lake City, Utah.

### \$6,000,000 Pipe Line for South Louisiana.

Belchic & Laskey of Shreveport, La., announce the construction of a line to supply natural gas in southern and southwestern Louisiana, to be completed in August or September. The line will be 240 miles, 16 inches in diameter, and is reported to cost \$6,000,000. It will extend from the Richland gas fields almost to the coast and will serve important cities and towns. A branch will extend from Lecompte to Lake Charles, serving De Ridder, De Quincy and other towns in this section, while another branch will extend from Lecompte through Bunkie, Opelousas, Lafayette, New Iberia, Franklin, Abbeville, Erath, Rayne, Welsh and interlying communities. The company advises that no contracts have been awarded.

### New Southern Airways Planned.

Among seven airway routes announced by the Department of Commerce to be lighted by June 30 are New York-Atlanta, 757 miles, and Louisville-Cleveland, 345 miles, with the following Southern routes to be considered for the fiscal year 1929: Miami-Atlanta, 633 miles; Dallas-Galveston, 287 miles; Dallas-Laredo, 395 miles; New Orleans-Atlanta, 483 miles; Atlanta-St. Louis, via Birmingham and Memphis, 593 miles; Jacksonville-Savannah-Norfolk, seaplane airway, 810 miles; Key West-Miami, 128 miles; Birmingham-Louisville, via Nashville, 341 miles, and Tampa-Titusville, 110 miles.

### English Cotton Mill Losses.

Manchester, England, January 2.—The officials of the Cotton Yarn Association have issued a special circular to the directors of all Lancashire mills spinning American cotton. The statement reports that since November 15 margins have been reduced still further and now show heavy losses before any interest or depreciation is charged. The official record of the sales of yarn at present shows that the losses range from £56 to £294 per week. The weekly loss refers to 100,000-spindle mill working full time. "This loss on the production of the trade is £39,000 per week or £1,950,000 per annum," says the statement. "Since this is occurring before any interest or depreciation is charged the assets of the cotton mills are being given away at this rate."

### Tampa's \$1,500,000 Municipal Hospital.

The new municipal hospital erected on Davis Islands by the city of Tampa at a cost of \$1,500,000 has recently been dedicated. The west wing has not been completed but the portion of the structure now in service is said to be adequate for present needs. The building is of steel frame construction, 350 by 45 feet, 6 stories, with a cream-colored brick exterior and stone trimming, concrete foundation on piling, terrazzo, rubber tile, linoleum and composition floors and tile and built-up roof. It has accommodations for 180 patients, including 90 private rooms. Stevens & Lee of Boston, Mass., and M. Leo Elliott of Tampa are the architects, and the Fleisher Engineering and Construction Company, Tampa, is general contractor.

### To Promote Latin-American Trade.

In advocating the teaching of Spanish in American schools, O. K. Davis, secretary of the National Foreign Trade Council, cites the development of United States trade with Latin-American countries and adds that "no language has more rapidly increased in practical use among Americans in the last 10 years" in international commerce. James A. Farrell, president of the United States Steel Corporation, is chairman of the National Foreign Trade Council. In part, Mr. Davis says:

"We find ourselves committed to selling the Latin-Americans one-third of all the manufactured goods exported from this country and thousands of young Americans are going to be called on to carry on the connection. Practically one-fifth of our entire export trade finds its market in the countries between the Rio Grande and Cape Horn. Our imports from Latin America are habitually greater in value by about \$100,000,000 than our exports to those countries. The total of our foreign trade with them is approximately \$2,000,000,000 a year. Last year our sales to the markets south of the Rio Grande were well over \$900,000,000. Throughout the whole of Latin America we are selling more of our products today than are our three principal competitors—England, Germany and France—put together."

In conclusion, Mr. Davis says that when the Fifteenth National Foreign Trade convention meets in Houston on April 25, 26 and 27, next, Latin-American visitors will be present from all the larger countries south of the United States and 1500 of the leading American foreign trade executives will turn their minds to friendly co-operation with these nations as the most important field of business statesmanship now available for the United States.

### \$7,000,000 Expansion Program of Carbide Co.

Charleston, W. Va.—Plans of the Carbide and Chemical Corporation of South Charleston for the expansion of plant facilities this year at a cost of \$7,000,000 marks another important step in the development of the Kanawha Valley. This company is a subsidiary of the Union Carbide and Carbon Corporation of New York, which is said to have definitely determined to center plant expansion in this locality. Work contemplated during the year includes manufacturing plants on Blaine's Island near Charleston.



NEW MUNICIPAL HOSPITAL RECENTLY DEDICATED AT DAVIS ISLANDS, TAMPA.

## \$5,000,000 Steam Power Plant for Texas.

### First Unit of 15,000 Kilowatt Capacity—Ultimate Capacity 45,000 Kilowatts.

George McQuaid of the Central and South West Utilities Company, Dallas, Texas, controlling the West Texas Utilities Company, Abilene, advises that the latter will start construction early in the year on a large steam plant at Lake Pauline, five miles from Quanah, Texas. The first unit will have a capacity of 15,000 kilowatts, much of the machinery for which has been purchased, including a General Electric turbo-generator and three 1000-horsepower Babcock & Wilcox Stirling boilers. A Foster-Wheeler 200,000 square foot surface condenser, with circulating water pump, air pump and hot well pumps, has also been purchased. The circulation pump will handle 36,000 gallons of water per minute, the water to be cooled by the surface in Lake Pauline. The completed plant will consist of three 15,000-kilowatt units and is reported to cost \$5,000,000. Oil and gas will be used for fuel, but the plant has been designed to use powdered coal if necessary.

A sub-station with four 6667 KVA transformers will be erected to place energy on the line at 66,000 volts. It will be generated at 13,800 volts. Four transmission lines will connect the plant with various parts of the system, one of which will lead to the interconnection with lines of the Southwestern Light and Power Company in Oklahoma, associated with the Central and Southwest Utilities Company. At Quanah interconnection will be made with lines of the company from Abilene, and with lines of the Southwestern Light and Power Company and the Texas Electric Service Company.

The Lake Pauline site was selected for the plant as being near the center of territory and load required by the north end of the West Texas Utilities system. The load requirements and the Oklahoma company will use the capacity of the first unit at once, it is said. Plants of the company at Abilene, San Angelo and Quanah are at economical transmission distances and tied together with two pairs of heavy lines.

The West Texas Utilities system serves 100 communities in 38 counties, having an available generating capacity of 40,000 horsepower with more than 1500 miles of lines. The latter are connected with similar lines of other companies to provide exchange of energy and insure against interruptions to service. Territory served by the company extends to the McCamey and Yates oil fields, 250 miles to the Southwest, and to Clarendon, the same distance north in the Panhandle.

### Optimism and Advertising to Help Textile Industry.

New Orleans, January 14—[Special.]—If the cotton textile industry adapted itself to salesmanship and effort in the modern sense, the condition of the cotton farmers in the South would not be subject to such swift changes; if the mills sought to increase consumption, the farmers would not be so afraid of overproduction—this summarizes the opinions of A. C. Beane of Fenner & Beane, a keen student of cotton problems.

"The cotton textile industry," Mr. Beane says, "is one of the world's largest, and it is perhaps the most inept of all the major industries in catching step with modern business thought. The industry apparently concerns itself principally with attaining mechanical efficiency. It makes no outstanding bid for new markets. Its cry for a generation has been, 'We cannot profitably manufacture goods at the present price of cotton.'

"If the record of industrial achievement by this country

within the past decade proves anything at all, it proves that increased distribution is the only natural accelerator of production. It proves that salesmanship can and does create a demand for a product where none existed.

"What a marked contrast with pessimism in the textile industry is a statement of Chairman Raskob of the General Motors Finance Corporation, that this country will produce 5,000,000 motor vehicles in 1928! One condition inflames the public imagination and breathes of success, the other tends to reduce buying interest.

"It is my belief that the philosophy of textile manufacturers is susceptible of being changed, and such effort lies, I believe, in proper advertising. I do not mean hit-or-miss efforts, but by the broadest possible campaign of advertising along lines of modern methods.

"Popularize the products of the mills. Teach the hundreds of millions of the world's population that common decency demands the use of clean handkerchiefs, that hygiene insists upon frequent change of underclothing, that one's velour chair is more comfortable in summer if cloth covered, etc."

There has been only sporadic advertising by the textile industry. The mills as a rule seem to think only in terms of curtailment, wage reduction, fewer working hours and the cost of raw material, says Mr. Beane, and adds: "So far as the titanic power of advertising is concerned, the American mills stand where they stood 25 years ago. They fail to conceive of the stupendous buying power of the American public."

### Copper Production Last Year Next to Largest Peace-Time Output on Record.

The outstanding features of the copper industry in 1927, according to the United States Bureau of Mines, were a relatively maintained production, a decrease in imports of refined copper, an increase in exports of metallic copper, a decrease in total stocks and a falling off in domestic withdrawals.

Stocks of refined copper available for consumption were 22,000,000 pounds larger at the beginning of 1927 than at the beginning of 1926. The small drop in refined copper output and the decrease in imports of refined copper made less copper available for consumption and, together with the increase in refined copper exported, entirely offset the decrease in domestic withdrawals. Therefore, the increase in stocks of refined copper in 1927 was relatively the same as in 1926, approximately 22,000,000 pounds.

The smelter production of copper from domestic ores in 1927, as determined by the Bureau of Mines from reports of the smelters showing actual production for 11 months and estimated production for December, was 1,696,000,000 pounds, compared with 1,740,000,000 pounds in 1926. The 1927 production is 2.5 per cent less than that of 1926, but, with the exception of 1926, is the largest peace-time production on record. The estimated smelter production from domestic ores for December, as reported by the smelters, was 145,000,000 pounds, which is 4,000,000 pounds higher than the average for the 11 months preceding.

The production of new refined copper from domestic sources, determined in the same manner as smelter production, was about 1,739,000,000 pounds, compared with 1,731,000,000 pounds in 1926. In 1927 the production of new refined copper from domestic and foreign sources amounted to about 2,318,000,000 pounds, compared with 2,322,485,000 pounds in 1926, a decrease of nearly 4,500,000 pounds, or .2 per cent. The production of secondary copper by primary refineries decreased from 225,118,000 pounds to about 216,000,000 pounds in 1927, or 9,000,000 pounds, so that the total primary and secondary output of copper by the refineries was a little over

.5 per cent lower in 1927 than in 1926, being about 2,534,000,000 pounds, compared with 2,547,603,000 pounds.

The imports of manufactured copper during the first 11 months of 1927, according to the Bureau of Foreign and Domestic Commerce, amounted to 660,326,768 pounds, a monthly rate of 60,000,000 pounds, compared with 779,441,803 pounds for the entire year 1926, a monthly rate of 65,000,000 pounds. The total imports for 1927 will very likely show a decrease in quantity approximating the monthly average for the year.

The exports of metallic copper during the first 11 months of 1927 amounted to 965,434,212 pounds, compared with 960,220,112 pounds exported during the entire year 1926. If the exports of metallic copper in December equal the monthly average for the first 11 months of the year, nearly 88,000,000 pounds, the total for 1927 will be about 1,053,000,000 pounds, an increase of about 10 per cent over the exports in 1926. In the first 11 months of 1927, 884,715,683 pounds of refined copper in ingots, bars, rods and other forms were exported. Of this quantity Germany received 201,916,191 pounds, the highest amount; the United Kingdom was next with 184,915,070 pounds, and France was third with 100,085,627 pounds. In the entire year 1926 the United Kingdom received the largest amount, 200,053,892 pounds, France was next with 177,934,644 pounds and Germany was third with 153,360,480 pounds. Exports to Germany for 11 months show a large increase over those for the entire year 1926. When December's figures are added, exports to the United Kingdom will very likely show a small increase and those to France will show a large decrease.

Refineries report that at the end of 1927 approximately 168,000,000 pounds of refined copper would be in stock, an increase from 146,000,000 pounds at the end of 1926. It is estimated that stocks of blister copper at the smelters, in transit to refineries, and at refineries, and materials in process of refining, would be about 380,000,000 pounds on December 31, compared with 455,000,000 pounds at the end of 1926, a decrease of 75,000,000 pounds. Therefore, a decrease of 53,000,000 pounds in total smelter and refinery stocks is indicated.

The quantity of new refined copper withdrawn on domestic account during the year was about 1,442,000,000 pounds, compared with 1,570,000,000 pounds in 1926, a decrease of 128,000,000 pounds, or approximately 8 per cent. However, domestic withdrawals in 1927, with the exception of those in 1926, were larger than those of any other peace-time year.

#### Jute Carrying Steamers Between East India and New Orleans.

The United States Shipping Board last week authorized the Merchant Fleet Corporation to assign to the Roosevelt Steamship Company, managing operator of the American India Line, as many vessels as may be necessary to extend its Calcutta service to ports on the Gulf of Mexico as well as to North Atlantic ports. This is to provide the Roosevelt service with a line to New Orleans and will place the American steamers in a better position to obtain a fair proportion of the East Indian jute trade. It has been estimated that three of four more vessels may be required.

#### Architect for \$500,000 Chattanooga Building.

Chattanooga, Tenn.—The R. H. Hunt Company, Chattanooga, has been commissioned to prepare plans for the proposed building here for the Hamilton Trust and Savings Bank. Definite details have not been determined, but tentative plans call for a six-story structure to cost about \$500,000. Preliminary sketches have been started.

#### TEXAS TEXTILE OPPORTUNITIES.

#### State Led Whole Country in Percentage of Gain in Manufacturing in 1925.

Plans were launched for bringing about the establishment of more cotton mills in Texas at a recent meeting in Austin of the textile development committee, which is composed of a number of leading business men and engineering experts of the State. The committee was appointed recently by Governor Dan Moody. Many New England mills are ready to move to Texas or some other Southern State where conditions for their operation are favorable, it was stated. Several executives of Texas cotton mills attended the meeting and asserted that some of the thirty-five textile mills in the State were making annually as high as 25 per cent profit on the investment.

John W. Carpenter of Dallas, president of the Texas Power and Light Company, who was elected chairman of the committee, delivered an address on "Texas' Textile Opportunities." He stated that the labor situation in the State was most favorable. "Now is the time to assure the future of textiles manufacturing in Texas. Yesterday the industry belonged to New England. Today it is in a state of economic unrest. Tomorrow it will be firmly established at points in the South. Whatever welcome Texas people give to the mills will be lost after the present moment of opportunity has passed. The time for home investment, for community and State advertising, for co-operative efforts toward getting these mills for Texas is now." Continuing Mr. Carpenter said:

"Cotton mills and woolen mills are the natural industrial partners of Texas leadership in sheep and goats. It is because success is assured in this State for properly managed textile enterprises that Texans who have studied the situation are eager for the relocation of mills within our borders.

"Why do we regard success as assured? We base our belief on what we know about the experiences of the 35 mills already in Texas, the turbulent history of the textile industry in England and the peculiar advantages that Texas has to offer.

"Climates and soils do not change with human fads and fancies, which means that the supremacy of Texas in cotton production will continue unchallenged. It signifies, further, that the State will always exercise an unrivaled leadership in the production of wool and mohair. Ample supplies of raw materials at their very doors can always be depended upon by Texas mills. There are other things that Texas climate assures. It means favorable year-round operating conditions, consistent good health on the part of workers, relatively low cost of living, contentment in the families of employes. The man in moderate circumstances appreciates sunshine and pleasant working and playing conditions to the same extent as the man who moves to Texas to play golf and fish and swim and enjoy life in manifold ways.

"Among Texas' natural resources of particular appeal to executives of woolen mills is the abundance of pure water for the washing of fleeces. Electric power is another Texas resource that makes operation so economical.

"Labor is the big factor. Texas wages are approximately 25 per cent lower than those of New England, yet the standard of living will be found higher. The very high percentage of white native-born American population is of prime interest to mill men who have had to cope with foreign classes susceptible to the machination of professional agitators.

"Construction and maintenance costs are appreciably low in Texas, due in large measure to the lower cost of labor.

"Decentralization of industry is proceeding at a lively rate. Texas is getting an important share of the manufacturing released from its previous geographical handicaps. This is clearly indicated in the recent report of the United States Census of Manufactures for 1925. This shows that Texas leads the entire country in percentage of increase in manufacturing, this State receiving nearly 11 per cent of the total gain in the United States during the two-year

period 1924-1925. The Texas increase amounted to \$268,395,639, as against \$55,526,000 for New York.

"Texas has ports, railroads, paved highways, electric freight lines, great cities, adequate banking facilities, all the essentials for industrial progress. It also has schools in which it is training young men for industry. Texas Technological College and the A. and M. College have unexcelled equipment and instruction in textile engineering. The University of Texas is unapproached in the thoroughness and completeness with which it teaches the economics of cotton. Large numbers of courses in cotton classing are available to Texas youth."

"We are prepared for a great textile industry."

The Texas Textile Committee was recently organized with the following members: John W. Carpenter, president, Texas Power and Light Company, Dallas, as chairman; Carl L. Pool, president of the Pool Manufacturing Company, Sherman, vice-chairman; W. L. Clayton of the Anderson-Clayton Cotton Company, Houston, treasurer; G. M. Knebel, executive vice-president of Texas State Manufacturers Association, San Antonio, secretary; W. E. Austin, Fort Worth; Albert Clifton, president of Clifton Manufacturing Company, Waco; R. M. Kelly, president of the Kelly Plow Works and head of the East Texas Chamber of Commerce, Longview; E. H. Kifer, vice-president and general manager San Antonio Public Service Company, San Antonio; J. A. Kemp, Wichita Falls; J. Perry Burrus, president of Burrus Elevator Company, Dallas, Texas.

#### New Style for Army Crating Lumber.

Through application of the short-length principle to Army specifications, a 35 per cent saving in the cost of lumber for Army crating purposes has been effected by the Washington General Depot, according to the National Committee on Wood Utilization of the Department of Commerce. Heretofore, specifications called for lengths of 16 feet dressed four sides, but the committee recommended lengths of four feet and up and dressed two sides and also drafted new quality specifications which made this stock more useful to the consumers and easier for the producers to turn out. The specifications were submitted to industry and approved.

#### St. Louis Becomes a Preserves Center—South Supplies Principal Raw Materials.

St. Louis, Mo., January 14—[Special.]—Through the manufacture and distribution of jams and jellies aggregating \$3,500,000 a year, St. Louis has become one of the largest centers of that industry in the United States. The ingredients are supplied principally by Tennessee and Arkansas. One St. Louis firm, whose preserving plant is described as the largest in the country, recently shipped an entire trainload of preserves, jelly and apple butter to 16 States, and the St. Louis output as a whole goes to 36 States. Made up of 44 cars, this train carried nearly 1,000,000 jars, valued at \$150,000, probably the largest single shipment of such goods from any city.

While the bulk of these St. Louis products goes to Southern States, the trade territory extends to Las Vegas, N. M., in the West and Boston in the East, while a carload of jelly is shipped regularly in every 20 or 30 days to Minnesota cities. Besides jams and jellies, one concern does a large business in apple butter, olives and mustard.

Strawberries for the industry come from Tennessee, Arkansas and the Pacific Coast, one firm taking about 75 carloads a year. Pineapples come from the Hawaiian Islands, peaches and apricots from California, loganberries from the Northwest, cherries, grapes and damsons from Michigan and New York, currants from the Hudson River Valley, apples from the Northwest, Missouri and Illinois, and peanuts from Georgia, Alabama and other Southern States.

#### Farmers Relief in Advertising.

By N. L. WILLET, Beaufort, S. C.

The crux of life is food, which means that the farm transcends the factory. But factory products, because proprietary, are nationally advertised and so are widely distributed under standardized prices, while the non-proprietory, unsung products of agriculture, lie rotting in the ground. The farmer feels a pride in his high calling, for is he not giving to the world what the world must have and needs most? But how pathetic it is for him to find that, in spite of his sweat and his months of toil and in spite of the deterioration of his soil, his beautiful products have no sale or perhaps carry a price below cost of production. Under this regime this country may drift into a Russian status, where ignorant peasants who cannot find a place elsewhere till the soil to keep body and soul together.

Think of the amazing array, the almost countless number and the enormous cost of advertisements in modern journals—and remember here that a farmer's hand penned not a single one of them. Our Government on its part is continuously discovering new agricultural processes and facts and is bringing in numbers of valuable new economic plants for the farmer; but, because there is not adequate publicity, much of this progressive work does not reach all the farmers.

We are well-nigh distracted today in trying to find means for helping agriculture. No two persons seem in agreement. The result will be zero. Why not, then, let the Government do a little national advertising? Why not advertise the use in the North of rice and cornmeal and the yellow yam sweet potato? Why not advertise the greater use of vegetables and of "greens"? Let the Government give wide publicity to the value in the daily diet of the apple and the orange and of grapefruit.

For instance, consider the Southern yellow yam. A Beaufort trucker today has 4000 bushels—300 bushels per acre—but he can't find a market. The Northerner knows little of baked, fried and candied sweet potatoes, or of sweet-potato pone and pie and pudding. Here at Beaufort the trucker, with his vegetables all shipped, and as a summer crop and with practically no expense can grow as a minimum 250 bushels per acre of this valuable, highly nutritive, easily kept crop. Is there any other food crop so productive per acre as this? Cannot a flour be made out of them or starch or alcohol? For experimentation or permanent use Beaufort has a new large cement packing plant that can be had for a song, and it has in the "Gullah negro" a little world of labor carrying the most moderate daily wage. How much better could the Government itself help than in exploiting the Southern sweet potato, both in finding processes and in doing here national advertising?

On this coast here, as another example, is an infinity of casena. It's a beautiful evergreen bush, with Christmas berries on it, and it has an abundance of leaves which the Indians used as a tea and is the tea yerba mate in which South America luxuriates. Prof. George F. Mitchell of the chemical department at Washington worked out here several years ago a process of preparing these leaves as a tea for the table and as a syrup for the soda fountain, but there was no subsequent publicity. A cup of this tea is a marvelous tonic and reviver. It is pleasant and agreeable and is also an excellent diuretic. Why does South America prefer it to Chinese tea? But who ever heard of casena as a drink in the United States?

My argument, therefore, is that the Government, in its perplexity as to agricultural help, should consider some plan of national advertising for the products of the farmer's fields, for he certainly cannot do it himself.

## \$50,000,000 to Improve St. Louis Water Front.

### Double Deck Street Would Cost \$19,000,000, Two Other Developments \$31,000,000.

St. Louis, Mo.—The City Plan Commission has approved a plan for improving the waterfront of St. Louis at a cost of \$50,000,000, the adoption of the plan marking the end of an 18-month survey. The project provides a double-deck traffic way and the improvement of an area adjoining the downtown district.

Three phases of the plan involve double decking Third street from north to south for 36 blocks at an estimated cost of \$19,000,000; acquiring and beautifying river front property east of Third street between Spruce street and Franklin avenue for 13 blocks, converting this area into automobile parking space and building elevated mall from Fourth and Market streets to the river front, all at a cost of \$22,000,000, and the construction of an elevated traffic way along the east end of the river front plaza from Spruce street to Franklin street and double decking parking space at a cost of \$9,000,000.

The Third street phase involves the erection of an elevated roadway 100 feet wide, with one section in the downtown district 140 feet wide. An elevated ramp would be built eastward from Fourth street to the river front, ending in an ornamental dock. Parking space for 4000 automobiles would be provided on each side of the ramp. The final phase would give the river front an elevated drive connecting with Eads Bridge and would increase parking space to accommodate 8000 automobiles.

While details for financing the project have not been discussed by the commission, members agree that an important step in this direction would be accomplished by a constitutional amendment authorizing "excess condemnation," which would give the city the right to sell or lease part of the land acquired.

### Activities of Durham Tropical Land Corporation.

In a letter to the MANUFACTURERS RECORD regarding its activities in the section of Green Cove Springs, Fla., where it maintains its general offices, the Durham Tropical Land Corporation, James D. Bourne, Jr., vice-president, states that it formerly owned 80,000 acres of land in Clay and Putnam counties. In April, 1925, the company made a contract to sell and develop the lands and in that year and in 1926 about 15,000 acres were purchased by citizens of Eastern and Western centers.

The company resumed control of the lands in June, 1926, and began to study how best to develop them into profitable farm projects. To facilitate this development a road has been constructed for the most part along the line between the two counties and a test farm of 80 acres has been cleared, fenced and partially planted. A poultry farm, with a five-room cottage, laying houses and brooder houses, has been established, with about 2000 chickens. A six-room bungalow has been built and is occupied by Fred Harries, manager of the farm lands, while five-room cottages have been built on tracts made ready for truck farming.

Plantings last year of Owari Satsumas are being watched, the section having been pronounced ideal for the culture of this fruit, by Dr. Harold Hume, for several years head of the Glen St. Mary Nurseries Company of Glen St. Mary, Fla. The Satsuma is grown on trifoliata stock, making it capable of withstanding occasional low temperatures of that section, and is marketed from one to three weeks before the regular Florida orange crop goes on the market.

The company believes that Florida offers great opportuni-

ties for the American truck farmer, and in connection with its demonstration it has an accounting system to determine the exact cost of producing marketable commodities. Also, it is now awaiting a soil survey and analysis by leading soil experts. It is estimated that the tract contains not less than 10 different grades of soil, with as many as five on a 10-acre tract.

### Ten 80,000-Barrel Tanks for Oil Field.

Kermit, Texas, January 14—[Special.]—The Gulf Production Company has purchased material for ten 80,000-barrel steel storage tanks at its tank farm in the Hendricks field of Winkler County. The company already has six 80,000-barrel tanks there.

### \$375,000 Texas Hotel Proposed.

McAllen, Texas.—Plans have been completed for the proposed \$375,000 hotel to be erected here for Morris Nelson of McAllen. The building will be 11 stories and basement, reinforced concrete frame, with tile roof. Harvey P. Smith of San Antonio is the architect.

### Buys Three Ice Plants in Mobile for \$750,000.

The United Public Service Company, Chicago, advises that it has purchased three ice manufacturing plants in Mobile, Ala., and for the present will operate the properties without much change. Plans for future improvements and developments, reported to cost about \$250,000, will be prepared by George E. Wells, consulting engineer of St. Louis and New York. Work will begin next fall. Reports from Mobile state that the deal involves a consideration of \$750,000 and includes the Southern Fuel and Ice Company, City Ice Company and the Weinacker Ice and Fuel Company.

### Motor Transport Division of Railway Association.

A meeting will be held in Chicago January 25 and 26 by railroad representatives of the United States and Canada to organize the Motor Transport Division of the American Railway Association and to outline its work. At that time permanent officers will be elected and a committee appointed to supervise activities. A call for the meeting was issued by A. P. Russell, vice-president of the New York, New Haven and Hartford Railroad and temporary chairman of the Motor Transport Division. George M. Campbell, New York, assistant to the secretary of the American Railway Association, is secretary of the division.

### Black and Decker Acquire Van Dorn Plant.

The Van Dorn Electric Tool Company of Cleveland, Ohio, manufacturers of portable electric tools, has been acquired by the Black and Decker Manufacturing Company of Towson, Md., specializing in the manufacture of portable electric drills and associated tools. The manufacture of Van Dorn tools will be continued at Cleveland and will be marketed through the Van Dorn sales organization. Likewise there will be no change in the Black and Decker products or distribution. The deal is expected to result in complete service for the automotive and industrial fields. The Black and Decker Company has branches in 17 cities in the United States and Canada, warehouse and distributing plant on the Pacific Coast, manufacturing plant in Canada and a sales organization in England.

An issue of \$143,000 refunding bonds bearing an interest rate of 4½ per cent has been sold by the Mobile County Board of Revenue, George E. Stone, treasurer, Mobile, Ala., to the Merchants National Bank, Mobile, at a premium of \$2522.

## Letters From Our Readers.

### To Promote Manganese Industry.

New York City, December 23.

*Editor Manufacturers Record:*

I have followed with great interest the arguments relating to the removal of the tariff on imported manganese ores and manganese products, with its bearing on an interesting and promising American industry, which have appeared in several issues of your important publication.

Like all questions pertaining to industrial development, that of the manganese industry depends for its growth on several factors: (1) Protection by a tariff; (2) cost of production; (3) abundance of raw material and concentration of low-grade ores.

In my connection for a number of years with American industrial problems I have been consistently in favor of enlightened temporary protection for those industries which, even if old, have not reached a high grade of stability. The manganese industry, always subject to vicissitudes, is entitled to a reasonable amount of protection, and I do not believe that the 1922 tariff is excessive. This is fair to the user of imported manganese and to the consumer as well, because the increased cost of iron and steel to which a certain proportion of manganese has been added does not visibly increase the cost of production.

From an analysis of the tariff it appears that manganese iron ore is free, also manganese ores not over 30 per cent. This gives medium-grade manganese produced abroad by cheap labor the advantage of lower cost of production, which, however, is more or less cancelled by high freight rates. The same grade of domestic manganese bearing an increased cost of labor and concentration, but lower transportation charges, could compete with the imported material and would be suitable for producing ferro-manganese of 72 to 82 per cent, Spiegel of 19 to 21 per cent and other manganese alloys. Considering that there exists a large tonnage of low-grade American manganese ores which could be easily concentrated, it seems that the present tariff ought to stimulate the mining of all grades of manganese which, after washing and concentration, will be used for the production of high-grade manganese alloys such as ferro-manganese and Spiegel. The tariff in any case will probably add an excess of \$5,000,000 to \$10,000,000 a year, but in turn it will protect a nascent American industry of great possibilities.

In many instances, chiefly when dealing with manganese ores found in a surface zone, mining costs should be low. Manganese formations, while extensive in area, are usually shallow, so that quarrying is not expensive and may even be as low as for iron ore mined under the same conditions.

Manganese ores are found abundantly throughout the United States and further prospecting will discover new sources of manganese formations. Thus, the important factor in the American manganese industry, abundance of raw material, is assured.

Given as a fact that there is great abundance of raw material, it will be realized by anybody familiar with the formation of manganese deposits that less than 5 per cent consists of high-grade ore; 40 per cent is of medium grade, yielding from 10 to 25 per cent manganese, and 55 per cent of low-grade ore, averaging 10 per cent. These medium and low-grade ores should be submitted to concentration necessary to raise the percentage of manganese high enough to make it suitable for industrial purposes. Nodulization has been tried with fair success in many instances; other methods of concentration can be utilized when the percentage or grade of ore and the nature of the associated gangues do not favor nodulization. This is the great problem to be solved by the

American manganese industry: The economical concentration of medium and low-grade ores. This industry should be operated on the lines of producing high-grade concentrates at a reasonably low cost. It will then become the basis of an industry that can be developed to an extent sufficient to supply at least 85 per cent of the demand.

Since the enactment of the tariff we notice that instead of an increase of production the reverse has taken place. This is obviously due to the slight demand for low-grade material, which in many instances is worthless, as well as to the lack of attention paid to the application of improved concentration methods which would convert waste material into a valuable asset. By placing the manganese industry within the lines of improvement outlined above mass production, which will enable producers to sell concentrates at a price competing with imported ores, can be rapidly developed. This is the solution of the problem which now confronts the logical development of the American manganese industry.

J. BAXERES DE ALZUGARAY.

### Every Business Man Vitally Concerned in the Fight Against the Coal Trade.

West Virginia Coal Association.

Dundon, W. Va., December 22.

*Editor Manufacturers Record:*

I have just seen your article in the December 15 issue of the MANUFACTURERS RECORD with reference to the suggestion contained in President Coolidge's message for a system of fuel administration.

Your remarks in defense of the coal industry are very timely and are to be commended not only by those in that industry, but by all owners and operators of American business in general, for, as you so wisely point out, the adoption of the President's suggestion would be but a step toward the regulation and control of all industries by gradual degrees. At present the coal industry is in the front-line trenches, as it were, endeavoring to maintain its independence at a time when the attacks of Washington bureaucracy and those opposed to the American industrial system are being diverted from other industries and concentrated on coal. A defeat for that industry would mean that some other industry would be the next to bear the brunt of the fight, with a weakened morale to oppose a strengthened attack.

J. G. BRADLEY, President.

### Go the Limit on Tax Reduction.

Industrial Investment Company.

Beaumont, Texas.

*Editor Manufacturers Record:*

In a recent issue you publish an article headed, "Tax Reduction Should Go the Limit." We wish to state that our ideas coincide with those set forth in this article. When we exempt people from taxation or try to fool them into thinking that they are getting something for nothing, we are encouraging bolshevism.

I believe every right thinking person is glad to pay into the Government the cost of protection under this free Government; if there are those who are not willing to support the Government, then they are not loyal citizens of this country in which they reside.

Heavy tax for corporations is only a camouflage, for, after all, the consumer must pay the freight and, if we place heavy taxes on corporations, the patrons of that corporation must of necessity pay the tax.

J. R. EDMONDS.

## IRON, STEEL AND METAL MARKET

### Pittsburgh Steel Market.

Pittsburgh, January 16—[Special]—Steel mill operations have increased sharply since the first of the year, and the rate of steel production is now fully 10 per cent above the average rate in December, which showed one per cent gain over the November rate. Thus, November was left, by a small margin, as the low month of 1927, while production is now increasing seasonally in accord with the uniform precedent of the past five years. Further increases are to be expected in February and March if not for a longer period.

#### Seasonal Increase in Activity

No special activity in any particular line accounts for the increase, which is a normal and natural one for the time of year. Apart from the seasonal trend, however, there is an extra volume of business on mill books in bars, shapes, plates, wire nails and sheets on account of price advances, the business being at old prices. In the case of sheets the advance is not fully the market as yet, but market prices of sheets are of little interest as consumers of black and galvanized are very well covered. In automobile sheets no advance was undertaken and indeed there are some rumors of the regular 4.00 cents price having been shaded.

In the first nine months of 1927 the Steel Corporation's unfilled obligations decreased almost continuously, there being slight increases in June, July and August. Then there were large increases in the fourth quarter: October, 192,927 tons; November, 113,404 tons; December, 518,430 tons. The increase in the quarter was 824,761 tons, or more than double the increase in the fourth quarter of 1926, 367,460 tons. The result of the fourth quarter gain is that for the whole year 1927 a slight increase is shown. The fourth quarter increase was due chiefly to the annual rail buying movement, to contracting in tin plate, order books for the present half year having been opened November 30, to large sales of sheets, and to usual quarterly contracting in bars, shapes and plates. The Steel Corporation's shipments in 1927 represented 79 per cent of capacity, against 88 per cent in 1926 and 78 per cent in 1925.

Actual turnover in the steel market has been light since the first of the year, which is the usual experience, while on account of previous engagements production and shipments have increased.

#### Heavy Buying of Agricultural Implements

The agricultural implement industry continues running at a high rate, which is likely to be sustained until the usual tapering off for the mid-summer period. The automobile industry is increasing its purchases of steel at what is a rapid rate in view of the recent very light buying, but will probably not reach its full rate before March or April at the earliest. The steel trade expects a large gain in automobile steel tonnage for 1928 over 1927, but is already somewhat concerned over prospects that very close prices will be demanded on account of automobile price reductions. Some representations along this line have already been made.

The Southern Railway has made an additional purchase of freight cars, taking 500 automobile box cars, while the Texas and Pacific has bought 1000 automobile, gondola and flat cars.

#### Rail Purchases

The Cotton Belt has bought 13,800 tons of rails, the Western Pacific taking 10,000 tons. Rail purchases in the quarter just ended totaled about 1,600,000 tons and about 100,000 tons are expected to be ordered shortly, completing the annual rail buying movement.

Fabricated structural steel awards reported in the past

fortnight totaled 80,000 tons, marking a pace well above the average of last year. The past three years have run about the same in fabricated structural steel and 1928 is expected to do at least as well.

Nothing important has developed in the past week in the matter of steel prices. All along the line the market is at least as steady as formerly and in many lines strong efforts are being made to secure somewhat better prices.

Pig-iron markets are expected to be somewhat more active in the next few weeks, iron foundry business being expected to improve as the steel trade becomes more active.

### The Metal Market.

New York, January 16—[Special]—The non-ferrous metal markets yet await the improvement which had been looked for early in 1928. These metals are not keeping pace with the showing in their sister industry, the steel industry, operations in which are increasing faster than had been expected. Except for copper, the prices of the major and baser metals are holding close to the low mark of 1927. Late in the week the tin price dipped below the low of last year. Zinc hovers at a level only \$1 per ton above the low of 1927 while lead is \$5 per ton higher.

Consumers have been showing a tendency to reach out for deliveries of metals farther in the future than has been their custom over the past few months; this is one of the encouraging signs. Zinc users are inquiring ahead as far as April; tin consumers have been purchasing six months in advance. Copper consumers are buying over the entire first quarter of the year and the lead users are content to call for February metal only.

#### Metal Buying Stimulated by Automobile Industry.

Purchasing of the metals has been best in those centers which cater to the automobile industry. The Michigan copper producers are furnishing large quantities. The lead producers are selling the metal to the battery makers who in turn are receiving orders from the automobile builders. Tin is to be used on a large scale in the manufacture of bearings for cars.

Among the precious metals platinum continues the most spectacular, the price of the pure grade having reached \$74 per ounce, which is \$12 higher than the quotation of six weeks ago. Quicksilver, on the other hand, has been slipping. The domestic price is off \$1 per flask at \$125 and the price has come down accordingly at London, though the London price is still some higher than the American equivalent. Silver has been holding steady at well over 57 cents per ounce.

#### Heavier Production and Shipments of Copper.

Copper statistics came out Thursday, showing heavier production and shipments for 1927 than in several years. Production last year was 1,476,506 tons, refined copper, among North and South American producers, while shipments for the same period were 1,466,709 tons; of these 641,865 tons were for export and 824,844 tons for domestic consumption. December surplus stocks of the refined grade increased 4424 tons, while surplus stocks for the year increased 9597 tons. A total of 63,637 tons were shipped overseas as against 60,862 tons sent to home users.

The total amount of copper above ground on January 1 came to 342,635 tons against 340,888 tons on December 1. Copper in process, in transit and as blister copper at refineries and smelters amounted to 247,337 tons. The feature of the 1927 statistics was the falling off of domestic consump-

tion. The home consumption of 824,844 tons for last year compares with 902,174 tons for 1926. Export shipments of 641,865 tons for 1927 compare with 525,861 tons for the previous year.

Buying of copper the past week has been well distributed between rolling mills and brass manufacturers in the American market. More than the usual proportion was taken in the Middle West because of automobile making activity, the Ford Motor Company in particular having been a buyer. Probably 50 per cent of the February requirements in copper have been bought and about 15 per cent of the needs for March have been taken care of.

Producers are quoting unchanged prices of 14½ cents, delivered to the Connecticut Valley, but a few custom smelters have shaded that figure, 14 cents having been rumored in a few cases. Sales for export were not as brisk the past week as for the preceding period. A week ago, in fact, 8000 tons had been sold for export on two days, Thursday and Friday. A circumstance preventing a price advance here was the sagging tendency of the London market following the gradual advances for the last week of last year.

Surplus stocks of zinc increased 1431 tons during December, stocks at the close of the year having been 40,751 tons. Production for the year was 613,548 tons, compared with shipments of 594,684 tons. Purchasing the past week has been fairly quiet. However, producers have taken firmer attitudes as to prices following the advance of zinc ore by \$1 per ton to \$36 in the tri-State district. Sellers of prime western slab zinc have been asking a premium of 2½ to 5 points for March and April delivery over the current quotation of 5.65 cents per pound, East St. Louis.

#### Tin Sales Light.

Sales of tin last week were small in contrast with the 2000 tons sold the previous week. The price fluctuated between 55¾ cents and 56 cents during the week. A price lower than at any time last year was reached Thursday when tin for all delivery positions sold at 55¾ cents per pound. The reason for this depression in tin is not clear, since the statistical position of the metal is better than a year ago when the price was at least 10 cents per pound higher. Consumption in 1928 will probably be as good as in 1927. Tin does not suffer to any extent from the employment of substitutes.

The lead market has been steady all week and moderately active. There was a tendency towards easiness in the East St. Louis market, but this was not reflected in any marked change in prices which are 6.30 cents East St. Louis, and 6.50 cents New York.

#### Birmingham Iron Market.

Birmingham, Ala., January 16—[Special.]—Volume production is in sight in coke, pig-iron and steel in Alabama, with prospects bright for improvement in coal. Quotations on all commodities, except in steel shapes, are at the lowest ebb for several years. Industries are beginning to show more activity and unemployment is being reduced. Pig-iron sales are numerous, but still in the small-lot manner, with the aggregate taking on favorable impression, first three months of the year output being covered.

There was over 30 per cent greater amount of surplus foundry iron on furnace yards the first of this year than at the same time a year ago, and this will probably be cut into also during the first three months. Ten blast furnaces are now producing foundry iron, seven basic and one special brand, but the furnaces on basic are of the larger capacity type.

Pig-iron sales are still on the base of \$16 per ton, No. 2 foundry. While no mention is made of second quarter business, it is generally understood that contracts now will care

for iron to be delivered during the first quarter. Intimation is again given that the anticipated advance in iron prices in all directions will be under way shortly.

#### Steel and Soil Pipe Stable.

Improved conditions are also noted in steel circles. The production will be increased and outward movement will show better tonnage this month.

Readjustment in the base price of cast-iron soil pipe has brought about activity in demand and several of the larger producers are increasing their output and moving stock from warehouse. At the pressure pipe shops there is much pipe moving and the indications are the spring business will come up to expectations sufficiently to warrant capacity output. Machine shops and foundries report healthy contracts. Sugar machinery is going to the Phillipines and inquiries from Louisiana indicate revival in interest in sugar in that section. The foundries and machine shops here are now given credit for being able to produce not only original sugar machinery, but also to supply all repair work. Diversified products are also active at the larger machine shops and foundries of the district and better employment is noted here.

Structural steel fabricators report local business good, with several specifications elsewhere in sight. The shops of this district are maintaining an activity that is showing results. Building operations are promising much.

Coal mining is hardly showing improvement equal to the activity of the month before the close of the past year. Much development has been under way in the coal fields of Alabama, while the demand has been off. It is estimated that when official figures are gathered it will be shown that Alabama produced around 20,500,000 tons of coal in 1927, against 21,508,812 tons in 1926. The use of pulverized coal is being encouraged and machines for the use of coal in that manner are being manufactured and installed here. Hope is expressed that there will be a recovery of much trade which has been lost in this direction.

#### Iron and Steel Need Coke.

The coke industry is holding its own, production high and very little foundry coke on hand with independents. The iron and steel interests are in need of practically all of the coke they can manufacture; in fact, very little, if any, coke is offered in the open market by these interests. Foundry coke is quoted at \$5 and shipment to larger centers of the country is still observed.

The scrap iron and steel market continues slow, no dearth of old material noticeable and future prospects bright in this regard. Heavy melting steel still sells at \$10.75, delivered in the home territory.

Quotations for pig-iron and iron and steel scrap follow:

#### PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$16.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$16.50; iron of 2.75 to 3.25 per cent silicon, \$17.00; iron of 3.25 to 3.75 per cent silicon, \$17.50; charcoal iron, f. o. b. furnaces, \$28.00.

#### OLD MATERIAL.

Old steel axles .....	\$16.00 to \$17.00
Old iron axles .....	16.00 to 17.00
Old steel rails .....	11.50 to 12.00
Heavy melting steel.....	10.50 to 10.75
No. 1 cast.....	14.00 to 14.50
Stove plate .....	13.00 to 14.00
No. 1 railroad wrought.....	11.50 to 12.50
Old car wheels .....	14.00 to 15.00
Old tramcar wheels .....	14.50 to 15.00
Machine-shop turnings .....	8.00 to 9.00
Cast-iron borings .....	8.00 to 9.00
Cast-iron borings (chem.).....	13.00 to 13.50

#### Steel Contract on \$4,500,000 Building.

Houston, Texas.—Contract has been awarded to the Petroleum Iron Works, Beaumont, for 4600 tons of structural steel for the \$4,500,000 35-story bank and office building to be erected at Main and Rusk streets, Houston, for Jesse H. Jones. Alfred C. Finn, Houston, is the architect.

January 19, 1928

## RAILROADS

### Big Total Freight Traffic of 1927.

There were 51,714,302 cars loaded with revenue freight during the year 1927 or very nearly an average of 1,000,000 cars per week for the entire twelve months. These are the figures announced by the car service division of the American Railway Association, Transportation Building, Washington, D. C., after the reports for the week ended December 31 had been received from the railroads. In 1926 there were 53,098,819 cars loaded with revenue freight, so that the total for 1927 shows a decrease of 2.6 per cent as compared with 1926, but an increase of nearly 1 per cent as compared with 1925.

In proportion to the amount of freight traffic carried during 1927, it was handled by the railroads with greater efficiency than ever before. It was distinguished by greater expedition and, proportionately, by the use of fewer trains and engines. The average daily movement per freight car was the greatest and, owing to improvements in locomotives and increased capacity of freight cars, the traffic was transported with less delay and heavier loads per train were hauled. For twenty-eight weeks in 1927 loadings of revenue freight actually exceeded 1,000,000 cars per week; in 1926 there were 27 weeks showing more than 1,000,000 cars loaded. In 1925 there were 20.

Loadings of grain and grain products increased during 1927 as compared with 1926; merchandise and less than carload lot freight also showed increased loadings, but there were decreases in the loadings of livestock, coal, coke, forest products, ore and miscellaneous freight. The declines in loadings of coal and of forest products were large.

### New Equipment.

Central of Georgia Railway is reported in the market for 500 gondola cars.

Seaboard Air Line has ordered 25 six-wheel switching locomotives from the Baldwin Works.

Mobile and Ohio Railroad has ordered 250 box cars and 200 flat cars from the Mount Vernon Car and Manufacturing Company; 250 gondola cars from the General American Car Company; 6 steel passenger cars from the Bethlehem Steel Company; 8 six-wheel switching locomotives and 5 Mikado type freight locomotives from the American Locomotive Co.

The Texas Company has ordered 200 tank cars of 10,000 gallons capacity from the American Car and Foundry Co.

### More Refrigerator Cars for Texas Products.

Austin, Tex., Jan. 14—[Special.]—Development of the citrus fruit and winter vegetable industries in the Lower Rio Grande Valley and other parts of South Texas has greatly increased the demand for refrigerator cars, and the Pacific Fruit Express has purchased 200 new cars of this type which will be delivered during 1928. With this purchase the company has a total of 40,311 refrigerator cars for moving perishable products over the Southern Pacific and the Union Pacific lines.

### Thornton and Alexandria Railroad Changes Hands.

The Thornton and Alexandria Railroad, 32 miles long from Thornton to Hampton, Ark., the latter being the county-seat of Calhoun county, has been purchased by several business men of Little Rock, and L. E. Moore, a real estate man, was elected president to succeed W. C. Ribenack. Hugh Carter was elected vice-president to succeed William W.

Stout, and W. H. Holmes secretary and treasurer to succeed F. W. Niemeyer. I. M. Stern and Lewis Rhoton were elected directors. Charles M. Conway is also understood to be interested.

This railroad was chartered about 22 years ago and served the Stout Lumber Company of Thornton; also the Arkmo Lumber Company. The former officers were lumbermen. It connects with the St. Louis-Southwestern Railway at Thornton and with the Rock Island Lines at Tinsman, Ark. It is stated that the line will be continued in operation.

### Southern Pacific Wants Texas Midland.

A petition has been filed with the Interstate Commerce Commission by the Southern Pacific Railway and its subsidiary, the Texas and New Orleans Railroad, for permission to acquire the Texas Midland Railroad, 125 miles long from Ennis via Terrell to Paris, Texas. E. H. R. Green of Terrell is president and chief owner. If the deal is closed for the acquisition of the line it is to be operated by the Texas and New Orleans Railroad of the Southern Pacific system.

### Lumber Line to Become Common Carrier.

Alex. K. Sessoms has been granted a franchise at Waycross, Ga., to build an extension of his lumber railroad into the city and to erect a station. The line now has 40 miles of track, of which 25 miles were built last year. An extension of 10 miles would connect it with the Georgia and Florida Railroad and 23 miles with the Seaboard Air Line and the Southern Railway system. The line now extends from the city limits of Waycross via Cogdell toward Lakeland, Ga. It is expected to become a common carrier when additional facilities are provided.

### Southern Freight Rate Hearings to Be Held.

Charles R. Seal, director of the Traffic and Transportation Bureau of the Baltimore Association of Commerce, has sent a circular letter to all members of the Association saying that the carriers have proposed the cancellation of less than carload commodity rates in Southern freight territory, including rates from Baltimore to points therein. He gives a list of commodities affected by this proposal, which will be the subject of hearings before the Southern Freight Association at Atlanta, Ga., between January 23 and January 31. The hearings are to receive statements from shippers as to why existing commodity rates between particular points on the articles listed should be continued, and the bureau offers to lend assistance to any shippers desiring it.

### Advocates Scientific Basis of Freight Rates.

The Turner Terminal Company, Horace Turner, president; owners of steamship terminals at Mobile, Ala., have published a booklet entitled: "Why Not a Scientific Basis of Freight Rates?" It contains a letter addressed by President Turner to the chairmen of the Congressional committees on Interstate and Foreign Commerce, viz., Senator James E. Watson and Congressman James S. Parker. It says that the country is still without any accurate yardstick for measuring rates and that the railroads are operated upon the basis of permitting their salesmen (traffic officials) to sell their manufactured product (transportation) without any idea of what that product actually costs. Either the losses swallow the

gains or the gains absorb the losses and leave a margin of profit in spite of the leaks.

Mr. Turner further suggests that the Act to Regulate Commerce be amended to direct the Interstate Commerce Commission to take steps to ascertain the cost of handling the various classes of traffic in the different sections of the country, and he remarks that adoption of this scientific basis so ascertained could be made compulsory. Every unit of measurement published by the Commission as a result of investigating costs would be a yardstick for all roads operating under similar conditions, thereby lessening the number of cases filed with the Commission and generally elevating rate-making to the same scientific basis in effect with other lines of business, where costs of production must be ascertained before the product is sold.

"Once, however, that transportation costs are ascertained and published," says Mr. Turner, "that will end practically all the contention, as few shippers would be so bold as to ask rate concessions for which others must pay, and no road would be warranted in asking for an advance in rates which deliberately refused to adopt the scientific basis of rates and eliminate its below cost traffic."

In conclusion Mr. Turner argues that the plan suggested of ascertaining transportation costs under average conditions in different sections is feasible; that it would settle the long and short haul controversy and also accomplish several other benefits.

#### New Baltimore and Ohio Coach Terminal in New York.

The Baltimore and Ohio Railroad Company has made arrangements to have a motor coach terminal in the 52-story office building now being built at the corner of 42d street and Lexington avenue, New York city, by the Combined Operation Corporation, Irwin S. Chanin, president. The coaches which will ply between this terminal and the Jersey City Station of the railroad, will enter the building from 41st street and will stop therein beside the ticket offices and waiting rooms, so that passengers will board and leave the coaches under cover instead of at the curb. The new station is to be ready by October 1 next.

#### Southern Pacific May Run Buses in Texas.

Austin, Texas.—An exhaustive survey and study of conditions in Texas is being made by the Southern Pacific Lines in Texas with the view of determining whether or not it shall establish bus lines for supplanting passenger train service upon several of its lines, according to A. D. McDonald of New York, president, who has been making an inspection trip over the system. He said that the system is successfully operating buses in California, but that it appears that in Texas many of the trains carry much express material, which makes it difficult to supplant them with buses. This is perhaps the main point to be considered.

#### Seaboard Financing for Control of Subsidiary.

The Interstate Commerce Commission has authorized the Seaboard Air Line Railway to acquire stock control of the Naples, Seaboard and Gulf Railway, a subsidiary of the system which connects Fort Myers with Naples, Fla., and the latter line was granted permission to issue \$1,179,000 of 6 per cent, first mortgage 25-year gold bonds to be sold to the Seaboard at par. The Seaboard Air Line was also given permission to issue \$1,184,000 of 6 per cent first and consolidated mortgage gold bonds and to pledge them as collateral security for short-term notes.

## TEXTILE

#### Addition for Process Mill.

Greenville, S. C.—The Southern Franklin Process Company awarded contract to the Gallivan Building Company, this city, to erect an addition to its mill here for housing a rayon dyeing plant. The cost of the addition and machinery will be about \$70,000.

#### Autauga Cotton Mills Installing New Machinery.

The Autauga Cotton Mills of Prattville, Ala., L. H. Beck, president, are installing new machinery, including 12 pickers, 16 cards, 64 drawing machines, 4480 spinning spindles, 168 slubber spindles, and 1152 speeder spindles, all manufactured by the Whitin Machine Works, Whitinsville, Mass.

#### Slane Hosiery Mills Incorporated.

High Point, N. C.—The Slane Hosiery Mills, Inc., have filed a certificate of incorporation to manufacture hosiery, underwear and other goods. The company has an authorized capital stock of 1250 shares without par value. Incorporators include W. H. Slane, Meredith C. Slane and Owen Reese of High Point.

#### To Increase Capital From \$500,000 to \$1,650,000.

Woodruff, S. C.—Directors of Mills Mill No. 2 have recommended an increase of its capital stock from \$500,000 to \$1,650,000 and formal approval will be requested at a meeting of stockholders on February 1. An addition has recently been completed to the plant, which houses 10,000 spindles and 650 looms, and 60 additional dwellings have been built. H. A. Ligon is president of the company.

#### Textile Mill to Open Next Month.

Summerville, Ga.—Officers for the Montgomery Knitting Mills, recently organized here, include G. D. Espy, chairman of the board; E. W. Sturdivant, president; Wesley Shropshire, vice-president; E. Montgomery, treasurer and general manager, and J. H. Edge, secretary. A building has been altered for the plant and machinery purchased. Operations will begin about February 1.

#### Contract for Proximity Mill Weave Building.

The Proximity Manufacturing Company, Greensboro, N. C., awarded contract to J. A. Gardner, Charlotte, for the construction of a new weave building, according to J. E. Sirrine & Co., Greenville, S. C., engineers. The structure will be 267 by 144 feet, 2 stories, of reinforced concrete. The first floor will be used for storage and 500 Draper looms have been purchased for installation on the second floor.

#### Sub-Contracts on Warioto Mill Addition.

The Fiske Carter Construction Company of Greenville, S. C., general contractor for an addition to the Warioto Mill at Nashville, Tenn., for the Morgan-Hamilton Company, advises the following sub-contracts have been awarded:

**Cast iron columns**—Paul Wright & Company, Birmingham, Ala.  
**Steel sash**—Atlanta branch of David Lupton's Sons Company, Philadelphia, Pa.  
**Structural steel**—Nashville Bridge Company, Nashville.

The addition will be 100 by 88 feet, two stories with provision for three additional stories, brick walls, steel I-beams and maple top floors. J. E. Sirrine & Co., Greenville, are the engineers.

## GOOD ROADS AND STREETS

### Proposed \$4,000,000 Bridge Over Cooper River.

Charleston, S. C.—A hearing has been held by Maj. N. Y. Du Hamel, United States district engineer in Charleston, on an application of the Cooper River Bridge, Inc., for authority to build a \$4,000,000 bridge over Cooper River, either at Drum Island from Lee street or from William street to the north of Drum Island. The first would be a steel structure with concrete pedestals, having a fixed span with 135-foot vertical clearance at the piers above mean high water. This would give 500 feet horizontal clearance. Another span, also having 135-foot clearance would provide a clearance of 600 feet across the main channel of Cooper River with a 261-foot approach span on either side.

The alternate proposal for a structure to the north of Drum Island provides for a steel structure with fixed span over Cooper River having a 640-foot horizontal clearance and 150-foot vertical clearance, with 384-foot approach spans at each end. The shoals would be crossed by a trestle on concrete piling, with a vertical lift drawbridge at the Wando channel having a 240-foot horizontal clearance and a maximum vertical clearance of 135 feet. A roadway on both bridges would be 20 feet wide.

Shortbridge & Hardesty are the engineers and Maj. J. Frank Sullivan, consulting engineer, both of New York. H. M. Bylesby & Co., Chicago, are interested in financing the structure.

### Texas County Sells \$1,000,000 Road Bonds.

Brownsville, Texas.—Cameron county sold the second \$1,000,000 of its \$6,000,000 road bond issue to the Brown-Crummer Investment Company, Wichita, Kan., and Dallas, Texas; Caldwell & Co., Nashville, Tenn.; American First National Trust Company, Oklahoma City, and Rhyan, Smith & Co., Cleveland, Ohio, at par, accrued interest and premium of \$2027. Proceeds, with the exception of \$185,000, will be used for road work already contracted. The county plans to sell another \$1,000,000 in May.

### Convention of County Highway Engineers.

The 21st annual convention of the county highway engineers of Missouri will be held on February 22, 23 and 24 at the Hotel President, Kansas City. Subjects to be discussed will include the County System of Roads, Completion of the State Highway System and the coming State Bond Issue. Charles H. Swift, Marshall, Mo., is secretary-treasurer of the Highways Engineers Association of Missouri.

### Louisiana Asks Bids on 21 Miles Roads.

Baton Rouge, La.—The Louisiana Highway Commission invites bids for the construction of three road projects covering a total of 21.31 miles, proposals to be received until January 31 for 6.40 miles of gravel in Bienville parish and until February 9 for two projects embracing a total of 14.91 miles of shell and gravel in Lafourche parish. Plans and specifications may be obtained from the commission.

### \$1,000,000 to Repair Baltimore Streets.

The Board of Estimates, Baltimore, approved recommendations of Charles F. Goob, chief engineer, to repair asphalt streets during 1928 at a cost of approximately \$1,000,000. The work will be divided among the American Paving and Contracting Company, P. Flanigan & Sons, Inc., and the Baltimore Asphalt Block and Tile Company, all of Baltimore.

### Bids of \$224,800 on Bridge at Danville.

Danville, Va.—Lowest bid for the bridge to be built over the Dan River here by the city of Danville has been submitted by Atlantic Bridge Company of Greensboro, N. C., at \$224,800, and contract will probably soon be awarded. The bridge will have a roadway of 28 feet. C. L. Scott, Jr., engineer.

### Asks Road and Bridge Bids.

De Ridder, La.—Proposals will be received until January 24 by the supervising board of road district No. 1 of Beauregard parish for grading and building bridges on 16.29 miles of highway. Grading will involve about 40,000 cubic yards of dirt and bridges about 410 lineal feet. Bids are to be filed with D. W. McFatter, secretary, De Ridder.

### Texas County Asks Bids on 33 Miles Roads.

Brownsville, Texas.—Cameron County Commissioners' Court will receive bids until January 26 for grading and drainage structures on approximately 33 miles of road. The work will be covered in seven projects, for which plans and specifications may be obtained from W. O. Washington, county engineer.

### High Point Sells \$1,500,000 Street Bonds.

High Point, N. C.—P. P. Pilcher, city manager, sold \$1,500,000 of street bonds to Harris, Forbes & Co., New York, and the Wachovia Bank and Trust Company, High Point and Winston-Salem, at \$1,500,570. The bonds will be issued in denominations of \$1000 and will bear an interest rate of 4½ per cent.

### Louisiana Parish Invites Bridge Bids.

St. Joseph, La.—Bids will be received until January 24 by the Tensas Parish Police Jury for building a bridge at Newton Ferry. A steel bridge at Choctaw bayou will be removed and rebuilt at Newton Ferry and a wooden bridge built on creosoted piling, with cypress frame and bents and oak flooring. Plans may be obtained from E. F. Newell, clerk of the police jury.

### 102 Miles Added to Tennessee Highway System.

Nashville, Tenn.—County road links aggregating 102 miles have been added to the East Tennessee highway system by the State Highway Department. Practically all will be macadamized. They include 18 miles from Dayton to Decatur, 12 miles from Cleveland to the Georgia line, 30 miles from Helenwood to Caryville, 12 miles from Trade to Mountain City, 2 miles from Trade to the North Carolina line and 28 miles from road No. 2 to Tellico Plains.

### Alabama Asks Bids on 110 Miles Roads.

Montgomery, Ala.—Bids will be received until January 25 by the State Highway Commission on 20 road and bridge projects covering a total of about 110 miles. This mileage is embraced in nine projects and includes 42.97 miles of gravel surfacing, 50.75 miles of grade and drainage construction and 16.22 miles of gravel and chert road. Four projects call for a total of 170,000 lineal feet of galvanized cable, with alternate bids on woven wire mesh and steel guard rail. Six projects call for concrete and timber bridges in Hale, Lamar, Lafayette, Tuscaloosa, Conecuh and Sumter counties, while one project calls for six drainage structures in Elmore county.

# TRAFFIC SURVEYS Valuable in Planning and Financing Highway Programs

By  
**N. W. DOUGHERTY,**  
 Professor of Civil Engineering,  
 The University of Tennessee,  
 Knoxville.

**H**Ighway officials are increasingly considering the traffic survey as of value in projecting programs, determining design features, apportioning funds, and expediting travel. The traffic survey has its greatest usefulness in aiding officials in the building of highways, while the highway transport survey has its chief value in giving an intelligent study of the movement of freight and passengers over the highways. The first deals with density of travel, variations in flow, weights of vehicles, speeds of vehicles, and obstructions at congestion points, while the other deals with commodities, length of haul, type of vehicle, tariffs that may be charged, and areas that may be served. One is concerned with the roadway and the other with the movement of vehicles over the roadway.

### The Traffic Survey

The movement of freight over the highways has an important bearing upon the design of pavement. If there is a large percentage of heavy trucks, the design must be made sufficient to carry the heavy loads. If the haulage is by truck and trailer or by wagons and teams, the design must be varied to suit the demand. The traffic survey must therefore discover weight and density of the various kinds of freight haulage on the highways and would not be complete if it only determined the number of vehicles using the road at the present time or during the past 10 years. Information must be accumulated which will predict the freight haulage for a reasonable period in the future.

The passenger vehicle has its influence in design particularly in determining width of pavement, and the survey must divide vehicles into groups, such as fast-moving automobiles and slow-moving horse-drawn vehicles. A highway carrying a mixed travel requires different treatment from a highway which carries vehicles of one kind, all moving at approximately the same speed. In most traffic surveys the data is so recorded that the number and percentage of each class of vehicles may be readily determined. The information should be sufficiently complete to give the weights of the heavy units which influence strength design.

A highway, like a water pipe, must

be able to carry the maximum flow; thus, it is necessary so to plan the traffic survey that it will give hourly, daily and seasonal variations in traffic movement. Certain typical days may be chosen for sufficient data.

### Future Travel

A traffic survey would not be complete if it failed to give information as to the travel which may be expected to use the road during its useful life. Surveys over a period of years have indicated a close relationship between motor vehicle registration and total volume of travel using the roads. Traffic counts at stations along the highway bear a

per capita is low. In predicting the future travel, the motor vehicle registration surveys may be projected forward after a study of the local conditions and the result will be a fair approximation of what the traffic will be five or ten years hence.

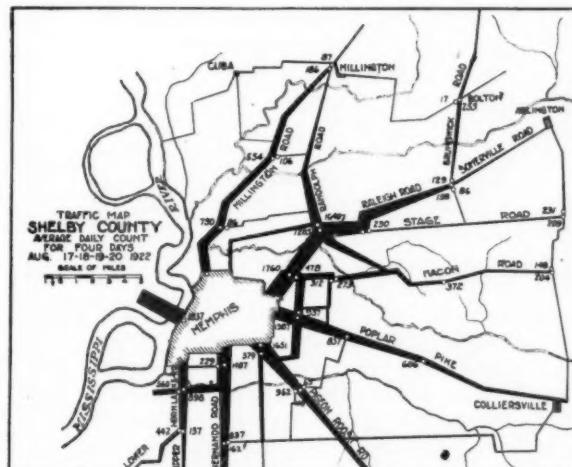
### Development of Program

The first problem of any highway organization is the selection of primary, secondary and tertiary routes. In many cases this work has already been done. The State highway departments have presented a fixed mileage to the Federal bureau of public roads for approval, the choice of which has been determined by travel, local topography and the desire to connect fixed termini. In many of the smaller Government units, an intelligent program is yet to be planned and the traffic survey may greatly assist in planning the needed improvements. In cases where the routes have been selected, the order of improvement may well be determined by the traffic needs.

In addition to determining routes and order of improvement, the survey will assist in the selection of type. Other factors than weight of vehicles and volume of travel determine the choice of the type in the several groups. At the present time we have sufficient information to determine the range of travel that may use the traffic bound type of pavement. The upper limit is placed for a two-lane road between 800 and 1500 vehicles per day. When the travel exceeds 300 to 600 per day, the maintenance methods should be carpet treatment. After 800

to 1200 vehicles are reached, the flexible type of pavement should be used and may be continued until 1500 to 2000 vehicles per day use the road. Above this travel, some rigid type of pavement is ordinarily selected. The question of local material, type of foundation, weather conditions, etc., will have a great influence in determining the actual selection of surface to be used.

Together with the general principles involved in the selection of type must be considered the allowable expenditure which may be made to secure the needed type of surface. Two hundred vehicles per day using a \$40,000 concrete road runs the vehicle mile cost to an excessive



Traffic Way Showing Density of Travel on a County Highway System.

close relation to the motor vehicle registration in the tributary area, and to predict future travel the motor vehicle registration in an area may be projected into the future and a reasonable estimate be made. The type of population, whether rural or urban, also has its influence upon the vehicle registration and the use of the vehicle, and properly to predict the future travel a study should be made of population trend and motor vehicle registration. At least one other factor enters, namely, the income of the people of the community; in some areas, the income per capita is high and the registration per 1000 inhabitants is much higher than in others where the income

figure; 2000 vehicles per day using the traffic bound gravel will probably be equally bad. The criterion is that of least traffic charge, considering the road costs and the cost of operation. In planning the improvement, a long look must be made into the future for such permanent features as right-of-way, location, grading and drainage. Where the highway is apt to develop into an urban district, it is well to acquire right-of-way for the design of a city street. As the population increases, the value of the right-of-way will increase, making it a good investment to look forward to the ultimate development of the highway.

#### Design Features

The strength needed in design is dependent on the type of foundation, the material used and the loads applied. The

where there is a preponderance of travel in one direction it has proved satisfactory. At the present time, the best opinion is that the capacity of the two-lane road is somewhere between 4000 and 7000 vehicles per day, depending upon the location of the road and type of travel.

#### Sources of Revenue

Before undertaking to discuss the distribution of revenues and tax burden, let us examine for a moment the principles which should underlie highway taxation.

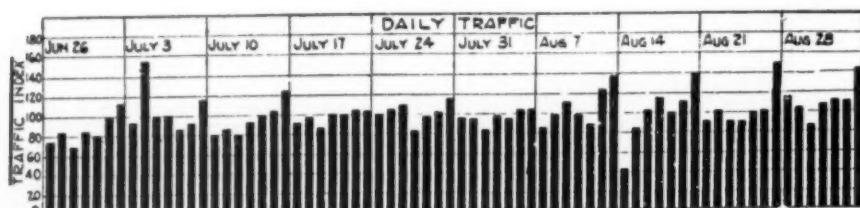
All are agreed that the payment should be made in proportion to the benefit derived. We may not all agree on the exact measure of the benefit, but certainly one item is the use of the public highway. Some vehicles have special privileges and special benefits, as, for

tion or license fee, which is collected largely for highway purposes. More studies of traffic information will determine the justice of these two methods of taxation and will assist the legislatures and others in authority in properly apportioning the burden and in prorating the proceeds. In the last five years, a large percentage of highway revenues have shifted from general taxes to a tax on the motor vehicle. To determine the future income, we must be able to predict rather accurately future motor vehicle registration. Experience during the last few years has shown a way to make such predictions.

#### Congestion Points

More and more attention is being given to the problem of increasing highway capacity by removing local obstructions. The usual causes of local congestion are: Road intersections, grade crossings, narrow pavements, narrow bridges, poorly placed traffic signals and urban areas. We need more information to show the actual loss to the traveling public caused by points of congestion. At present, special studies are being made of road and street intersections, railway grade crossings and other local obstructions, while time and speed studies are being made of densely traveled roads and through urban areas. The studies have for their object the elimination of obstructions economically feasible to eliminate. The time studies will show the economic loss to travel as it traverses a route and will assist in placing a value upon proposed improvements.

More information is needed as to capacity of one, two and four lane roads under varying traffic conditions. In many cases, we know the number of vehicles using the highway and may predict the number that will use the highway in the near future, but we do not know the



Daily Variation in Traffic at a Typical Traffic Station, the Range Being 60 to 150 Per Cent of the Daily Average.

traffic census should give the maximum weight of vehicle and the number of such vehicles using the highways. The information should further give the type of vehicle, because of the increased load due to impact. A heavy vehicle moving at 20 miles an hour will do more damage than the same vehicle moving at 10 miles per hour. The type of vehicle will also determine the amount of weight carried on the springs and the part of the load that is unsprung. A load carried on pneumatic tires will probably do less damage to a rigid pavement than the same load carried on solid tires. Overloaded vehicles, because of the great tax on springs, will do more damage and require heavier design than the same load carried on the vehicle which has a larger rated capacity.

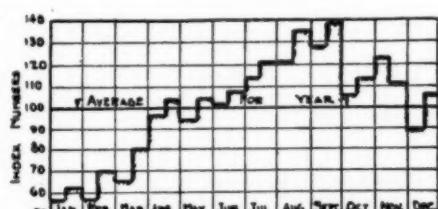
The width of the highway is determined by volume, speed and kind of vehicles. As the travel increases, more lanes must be provided. If there is a mixture of slowly moving and high speed vehicles it will be inconvenient to the fast moving vehicles; the danger hazard will be increased, and consequently the capacity of the road decreased. If a highway carries a large number of big buses or wide bodied trucks, the capacity is decreased, or the width of lane must be increased. Studies to date indicate that a two-lane road should have a width of not less than 18 feet and no more than 22 feet. The three-lane road is still a debatable question, because of the conflict of the right-of-way in the third lane, but

example, the vehicle operating for hire, or special trucking companies which insist upon the use of excessively loaded vehicles. The vehicles receiving special privilege should pay for the special benefits they derive.

A second principle is that the payment should be in proportion to the damage done or special expenditure to prevent damage done. The heavily loaded vehicle not only receives a special benefit, but it also may do excessive damage to the highway. The protection to the public lies in legislation which prevents the excessive load from using the highway.

Some studies have been made as to the distribution of travel as compared with the distribution of motor vehicles. In Tennessee, it has been found that on the State highway system the percentage of travel from rural vehicles is practically the same as the percentage of rural ownership. It, therefore, follows that the percentage of travel from urban vehicles corresponds closely with the percentage of urban ownership in the State. The traffic survey will give information as to urban and rural ownership and, therefore, give information as to a fair distribution of taxes levied, or information as to reasonable collections which should be made from these two groups of owners.

There is an increasing popularity of the gasoline tax. Owners of similar types of vehicles pay the tax in proportion to the use of the road. Throughout the United States, there is levied a regis-



Seasonal Variation in Highway Traffic at a Typical Station, the Range Being from 60 to 140 Per Cent of the Daily Average for Year.

exact capacity of a highway under all conditions of travel. Theoretically, we know the discharge when all vehicles move at the same speed. In many cases, observations have been made on the capacity for mixed travel, but it is obvious that the discharge will vary with the speeds of the several units using the highway. If all vehicles are slowed down, the capacity might even be in-

creased, but the fast-moving vehicles will be greatly inconvenienced.

Another field which is just being studied is that of the lasting effect on the movement of traffic caused by a local obstruction. Dean Johnson of the University of Maryland reports that a wave of vehicles caused by a local obstruction may continue on the road for a number of miles past the obstruction. Vehicles become grouped at a grade crossing, and on a heavily traveled road they will remain in a group for a number of miles. The point at which additional width is needed to overcome this difficulty is a problem for further study.

The solution of the obstruction difficulty is the removal of the obstruction. However, in many cases it is not economically possible completely to remove it and this means that other methods must be adopted, such as by-passing a congested urban area. A careful study of the convergence of highways on one principal city street may show a more feasible route for one or more of the entering highways. In this connection, reference is made to the study in Chicago published in the Cooke County Highway Transport survey.

In many cases, our traffic survey is ahead of its utilization. We know the density and type of vehicle on the road and in many cases the percentage of the group at the several speeds, and yet we do not know the exact width to use. We also know the weights of vehicles, and in many cases the future weights are fixed by law, and it is only recently that there has been developed a logical method for designing pavement thickness.

It is probable that our time studies and speed and distance studies will give valuable information which may be used in future design, but in this field also it is likely that the traffic information will be ahead of its full utilization.

## Changes in Automobile Design as Safety Factor

**A**NSWERS to queries by Percival White, 175 Fifth avenue, New York, in a symposium on increasing safety in automobile traffic, indicate that improvement in the construction of cars is a very prominent thought in many minds. From a large number of letters it appears that lowering the center of gravity of a car and construction of the body and frame is one unit are considered important points.

"The public is demanding more automobile speed than formerly and this demand is reflected in the increase in speed limits by various States," said a letter from Prof. L. L. Vaughan of the North Carolina State College of Agriculture

and Engineering. "So manufacturers should consider this demand and direct their efforts toward making the car as safe as possible."

"Double steel construction of the battleship type would be helpful in producing a stronger and safer automobile body," wrote J. H. Killius of the Cleveland Automobile Club. "At the same time, it is surprising how little damage is done when a car rolls over; while the body of the car is damaged, most of the injuries to the occupants are caused by being thrown against the inside of the car."

As Dr. William S. Kelster, Upper Marlboro, Md., saw it, "any mechanical construction or new development tending toward the safety of persons riding in motor vehicles is highly desirable—of course, this will not eliminate recklessness on the part of drivers, but it will tend to protect passengers from the risks incurred by such drivers."

In his letter to Mr. White, H. Ward Conde, Ottawa, Ill., wrote: "I often have wondered why some manufacturer did not come out with a combination body and frame, providing that the

frame can be easily straightened in case of a wreck job. This should make a lower center of gravity without sacrifice of clearance, and in a rural community clearance has become rather serious."

Dean H. W. Moody of the Mississippi Agricultural and Mechanical College advocated: Center of gravity of a car should be as low as practicable; double steel construction would be a helpful factor, and education of the motoring public as to the laws of the road.

In discussing the relative importance of certain proposed safety factors, R. A. Chase, secretary of the Palm Beach County Motor Club, believed "low center of gravity" to be of the utmost importance, while "good braking" headed the list in the view of the Charleston (W. Va.) Auto Club, expressed through its president.

Improvement in the construction of automobiles, as well as in operation, is necessary for safety, according to C. E. Coolidge, Georgia School of Technology, Atlanta; Prof. W. L. Kennon of the University of Mississippi and Dean William Vernon Skile of the Georgia School of Technology.

## Road and Bridge Items Increase in 1927

INDIVIDUAL news items published in the Daily Bulletin and in the construction columns of the MANUFACTURERS RECORD on road, paving and bridge work in the 16 Southern States for 1927 numbered 14,089, an increase of approximately 14 per cent over the 12,361 items of that nature for 1926. Making up the total for 1927 were 3403 bridge, culvert and viaduct notices and 10,686 road, paving and street announcements.

At the head of the States individually stood Texas, with 524 bridge items and 2338 road items, with Florida and Tennessee also in the foremost rank and the other States showing a steady maintenance of construction work.

During the year, 82,000 individual items, covering all classes of construction work, were published. Thus road and bridge construction items constituted about one-sixth of the reports in 1927.

### ROAD AND STREET ITEMS PUBLISHED IN 1927.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alabama .....	23	21	30	37	21	67	88	15	76	79	49	54	500
Arkansas .....	8	15	22	23	8	53	30	69	89	79	55	52	503
Florida .....	89	101	116	72	50	142	63	61	116	40	45	103	1,000
Georgia .....	11	38	72	67	51	18	28	50	49	14	25	37	466
Kentucky .....	18	43	88	100	62	104	90	31	53	23	24	16	652
Louisiana .....	36	35	27	25	17	29	23	30	54	50	36	55	417
Maryland .....	3	15	26	32	31	81	64	71	43	22	23	13	524
Mississippi .....	23	26	55	37	19	42	26	17	57	79	56	35	473
Missouri .....	47	66	51	34	29	60	69	61	66	38	59	66	626
North Carolina .....	9	30	54	63	33	38	34	20	46	26	20	61	434
Oklahoma .....	28	24	73	41	31	73	41	52	77	38	73	33	584
South Carolina .....	32	35	41	29	41	39	29	41	38	25	26	34	408
Tennessee .....	13	7	51	65	69	62	68	41	109	45	31	87	648
Texas .....	123	147	182	176	220	238	179	160	253	213	228	221	2,338
Virginia .....	15	26	37	29	32	50	35	17	31	19	23	9	323
West Virginia .....	15	21	61	60	80	104	87	101	127	53	18	10	737
Total .....	493	648	986	890	894	1200	954	837	1284	843	771	886	10,696

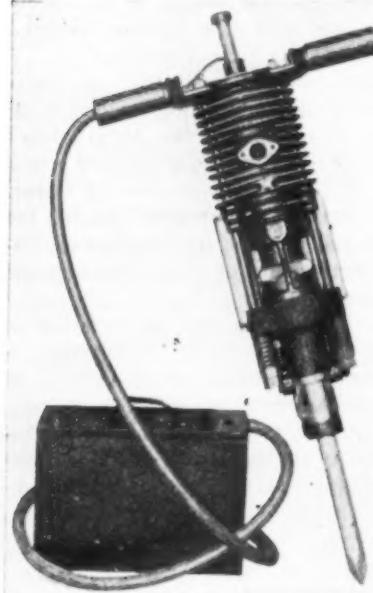
### BRIDGE AND CULVERT ITEMS PUBLISHED IN 1927.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alabama .....	19	2	13	7	14	4	23	3	21	18	15	35	174
Arkansas .....	4	6	12	4	2	5	21	23	22	17	18	28	161
Florida .....	48	17	37	27	34	20	31	26	54	27	41	30	392
Georgia .....	6	8	20	21	18	9	10	15	34	13	8	7	169
Kentucky .....	11	5	21	11	8	13	13	8	16	8	6	6	126
Louisiana .....	6	7	6	10	4	10	6	9	19	7	10	8	102
Maryland .....	2	6	8	11	11	9	8	..	14	4	2	4	79
Mississippi .....	2	29	26	25	12	16	20	25	17	17	6	19	214
Missouri .....	37	23	7	12	14	18	31	18	21	16	10	29	296
North Carolina .....	16	10	51	40	28	8	14	2	10	9	9	8	205
Oklahoma .....	14	..	1	3	..	13	19	3	30	34	29	12	158
South Carolina .....	14	17	18	14	4	10	25	14	34	14	12	33	209
Tennessee .....	1	8	50	36	13	17	35	14	47	18	11	76	321
Texas .....	19	53	33	77	25	35	37	66	65	35	34	45	524
Virginia .....	17	6	13	9	13	29	32	14	24	14	7	6	184
West Virginia .....	9	6	31	5	20	11	12	11	19	9	6	10	149
Total .....	225	203	347	312	220	227	337	250	447	235	224	356	3403

## NEW AND IMPROVED EQUIPMENT

### New Type of Pavement Breaker.

The Milwaukee Gas Tool Corporation of Milwaukee, Wis., has developed and perfected a new labor-saving device that promises great success in pavement breaking. For two years a number of them have been working under most severe conditions on all types of jobs.



PAVEMENT-BREAKING OUTFIT.

anvil direct to any standard cutting tool which may be used. The entire unit weighs but 85 pounds and will operate all day on two gallons of gasoline. It requires no outside equipment to operate it. It is a self-contained unit.

It is further announced that this machine will be manufactured by the Le Roi Company of Milwaukee, Wis., for the Milwaukee Gas Tool Corporation who will market it through contractor equipment distributors. Arrangements for distribution have been completed with many of the leading contractor equipment supply houses and the machine is now represented throughout the country.

### Vertical Boom Ditcher Work in Georgia.

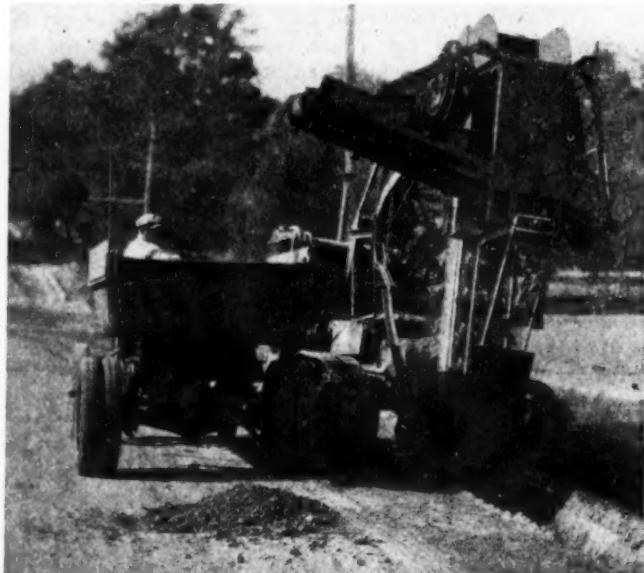
Another unique and successful application of a vertical boom ditcher is now being utilized in Thomasville, Ga., by the Wesco Company, whose main offices are at Chattanooga, Tenn. This company, organized for general contracting, does mainly municipal work and specializes on paving. It is now equipped to do curb and gutter excavation with speed and efficiency.

They recently purchased a Barber-Greene 24-inch by 7 foot vertical boom ditcher, specifically for doing curb and gutter excavation, preferring the regular ditcher, as their line of work is so varied that they wanted to be equipped to "go straight down seven feet if necessary."

Work was started with the machine in Thomasville early in November and, although the ditcher has not been in operation long enough to give fair cost figures, it has been doing excellent and practical work, showing that it is entirely adaptable to curb and gutter excavation on a very economical basis. One advantage is that it is designed to discharge the conveyor on either side, making it possible for the machine to make one long cut and then turn around, shift the conveyor and make the next cut, two cuts being required because a 40-inch ditch is specified.

The ditcher discharges the excavated material into trucks,

so that none of the earth falls back to the ground, and the material goes from the ground to the truck in one operation, all done by the machine. There are four trucks on the job, making short hauls, and they are loaded as fast as they can drive under the conveyor. The trucks used are of 1½-yard capacity, and one day's record shows that when the machine was cutting 18 inches deep, 41 truck loads were made in the



DITCHER AT WORK ON ROAD.

morning and 82 in the afternoon, a total of 123 truck loads for the day. During the day, the machine cut 978 feet of curb and gutter excavation or, counting the two cuts, 1956 feet of excavation. The machine travels at about 8 feet per minute on this job. The following day the machine loaded 142 trucks.

This vertical boom ditcher is built by the Barber-Greene Company, Aurora, Ill.

### Texas Lumberman Presents 600 Acres to College.

College Station, Tex.—A tract of 600 acres of land in East Texas has been presented to the Agricultural and Mechanical College of Texas by John H. Kirby, Houston lumberman and financier, to be used by the Texas Forest Service, a division of the college, for investigation, reforestation and development of forest land. "It is to foster scientific study of forestry in East Texas," said Mr. Kirby, "and to create a student loan fund for worthy boys, preferably those taking forestry courses." The loan fund will be administered by the Association of Former Students, and it is estimated that when the trees shall have ripened, the annual revenue will be between \$10,000 and \$15,000.

### Industrial Survey for Portsmouth.

According to Portsmouth Progress, official publication of the Portsmouth Chamber of Commerce, Inc., Portsmouth, Va., preliminary work is in progress on an industrial survey of the city. This work will consist of codifying and cross-indexing statistics on Portsmouth industries with a view to bringing them up to date at least once a year. From these the Chamber expects to get much information for prospective enterprises. The next stage of the survey will require the advice of an industrial engineer and the Chamber is now negotiating for the services of one.

# CONSTRUCTION DEPARTMENT

## EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

The date at the end of an item indicates issue of the Manufacturers Record in which earlier facts about the same enterprise were published.

## DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

### Airports, Airplane Plants, Etc.

Fla., Orlando—City, L. M. Autrey, Mayor, have plans to clear ground for two 500-ft. wide runways, each  $\frac{1}{2}$  mile long; other necessary details will be completed from time to time; S. Waters Howe, V.-Pres., State Bank of Orlando & Trust Co., will install 8,000,000 candlepower beacon standard, revolving type on top bank building; use in connection with air mail service.

Ga., Atlanta—Finance Committee of City Council, consider appropriation of \$70,000 for completion of Candler airport and maintenance of field during 1928; W. B. Hartsfield, Chrmn. Airport Committee.

Mo., Anglim—McDonald & Condie, Archts., St. Louis, Mo., making plans for \$50,000 factory to be erected by Curtiss-Robertson Airplane Manufacturing Co., St. Louis Flying Field; soon let contract.

Mo., St. Louis—Robertson Aircraft Corp., St. Louis Flying Field, reported, will inaugurate after Feb. 1 overnight air mail service from St. Louis to Dallas, Fort Worth, Tex., and other Southwestern points.

N. C., Raleigh—Carolina Airplanes, Inc., capital \$10,000, chartered; Alton Stewart, Eugene Mills, Commercial Bank Bldg.; L. R. Fisher, 130 E. Morgan St.

S. C., Anderson—P. S. Anderson, Inspector of Airways, reported, soon begin construction of Government's emergency landing field for air mail planes (Atlanta-New York route) at Anderson County Home for the Poor; cost approximately \$20,000; Anderson field listed as Field No. 12; equip with revolving beacon 51 ft. 6-in. high, General Electric type of 2,000,000 candle power, also other lights and markers.

Texas—F. G. Lippett, Mgr., Texas Air Transport, Fort Worth, reported, operations of two air lines for South Texas will begin about Feb. 1, from Dallas to Fort Worth to Waco, Austin, San Antonio, Houston and Galveston; later planes extending service from San Antonio to Mexican border at Laredo, connecting with any service which may be instituted from Mexico City.

Tex., Austin—Max Bickler, Chrmn. Chamber of Commerce Committee of Aviation, and associates interested in establishing municipal airport.

Tex., Fort Worth—C. A. Winder, Supt. Public Utilities, reported, two air mail routes being considered by Postal Dept., one to El Paso through Abilene, 550 miles and one to Denver through Amarillo and Colorado Springs, 625 miles, both have Fort Worth as Eastern terminal.

Tex., Mission—Mission Airplane Services, Inc., Wm. Steinhardt, V.-Pres., reported, let contract for 6 steel hangars of the Orange Car & Steel Co.'s design, cost approximately \$40,000.

Tex., Odessa—J. O. Eldridge, Sec.-Mgr., Odessa Chamber of Commerce and associates, interested in establishing airport.

Tex., San Antonio—San Antonio Machine Supply Co., 325 N. Centre St., reported, has contract for erection all steel hangar at Winburn Field; specifications call for one of the Orange Car & Steel Co.'s design hangars.

12-29

Tex., Wichita Falls—Wichita Falls Airport Co. stockholders and special Airport Committee, reported, acquired 240 acre tract on Burk Burnett road, establish airport to meet all government requirements.

12-8

### Bridges, Culverts and Viaducts

#### Proposed Construction

Alabama—State Highway Comm., Woolsey Finnell, Highway Director, Montgomery, considering 3 bridges: Escambia County—across Conecuh River, on Brewton-Andalusia road;

across Tombigbee River, near Gainesville, on Gainesville-Eutaw road, between Sumter and Green Counties; across Tombigbee River, at or near Epes; W. A. McCalla, State Highway Engr.

Ala., Birmingham—City Comm., Eunice Hewes, Clk., plans elevation of railroad tracks and elimination of grade crossings on Twentieth, Eighteenth and Fourteenth St.; A. J. Hawkins, City Engr. See Financial News—Bond Issues Proposed.

Ala., Mobile—Mobile County Board of Revenue plans 3 bridges. See Roads, Streets, Paving.

Ala., Pell City—State Highway Comm., Woolsey, Finnell, Highway Director, Montgomery, considering bridge over Coosa River near Pell City, on Pell City-Anniston Highway; W. A. McCalla, State Highway Engr.

Ark., Calion—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, considering toll bridge across Ouachita River near Calion, Union County; C. S. Christian, State Highway Engr.

Ark., Fulton—War Dept., Washington, D. C., reported, approved plans Arkansas State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, for bridge over Red River at Fulton; Kelliher Construction Co., Home Insurance Bldg., Little Rock, low bidder.

Fla.—State Road Dept., received low bids for 6 bridges. See Roads, Streets, Paving.

Fla., Daytona Beach—City, James T. Nelson, Mgr., plans concrete bridge over Reid's Drainage Canal, on Volusia Ave.: will be wide as Volusia Ave.; replace present wooden structure; J. L. Brennan, City Engr.

Fla., Kissimmee—Board of Bond Trustees, Atlantic-Gulf Special Road and Bridge Dist., D. C. Cox, Chmn., receives bids Feb. 15 at office of Carter & Damerow, Inc., Consist. Engrs., Vero Beach, for 154-ft. bridge across Kissimmee River, Turkey Hammock, Osceola County, 1950 lin. ft. creosoted timber trestle, 20-ft. roadway, steel swing span on concrete center pier; plans from Engr. Lately noted bids Feb. 2.

Fla., West Palm Beach—Palm Beach County Commrs., Fred B. Fenno, Clk., receive bids Feb. 1 for double leaf Scherzer rolling lift bridge, deck plate girder type, 82 ft. face to face abutments, 20-ft. roadway, two 5-ft. sidewalks, across Florida East Coast Canal, Palmetto Park Ave., Boca Raton; plans from Jake Boyd, County Engr.

Ga., Folkston—Charlton County Commrs. plan bridge over Satilla River at Burntfort.

La., Franklin—St. Mary Parish Police Jury plans 2 bridges across proposed canal at Cote Blanche and Cyprmort roads; cost \$20,000. See Financial News—Bond Issues Proposed.

La., Monroe—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, plans letting contract in March for \$600,000 to \$650,000 concrete bridge over Ouachita River at Louisville Ave.; cantilever "Jackknife" type of lift span: 36-ft. roadway, two sidewalks; West Monroe end will be on Trenton St. between Stelle and Mill St.; plans extending Louisville Ave. to intersect with Dixie-Overside Highway, at point .6 mi. east of city limits; Nicholls W. Bowden, State Highway Engr.

La., Rayville—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Feb. 9 for 105-ft. creosoted pile trestle bridge over Big Creek, on Rayville-Winniboro Highway, Richland Parish; seven 15-ft. panels, with gravel ballasted deck; earth approaches and gravel surfacing: 18,000 ft. B.M. untreated lumber, 1,140 lin. ft. creosoted piling; plans on file; Nicholls W. Bowden, State Highway Engr.

Miss., Belzoni—Humphreys County Board of Supervs., A. R. Hutchens, Clk., receives

bids Feb. 6 for dump or earth fill abutment at Silent Shade Bridge across Yazoo River; plans from C. E. Miller, County Engr.

North Carolina—State Highway Comm., plans bridge, approaches and fills, and underpass paving. See Roads, Streets, Paving.

Okla., Shawnee—City and Santa Fe System, F. Merritt, Ch. Engr., Galveston, Tex., reported, plans underpass under railroad tracks; cost about \$180,000. Address City Clk. See Financial News—Bond Issues Proposed.

S. C., Charleston—Cooper River Bridge Co., Inc., Charles R. Allen, V.-P., 148 E. Bay St., submitted application to Maj. N. Y. Du Hamel, U. S. Dist. Engr., Charleston, for permit to build proposed \$4,000,000 bridge over Cooper River, either at Drum Island from Lee St., or from William St. to North of Drum Island; first, steel structure, concrete pedestals, 135-ft. vertical clearance at piers, 500-ft. horizontal clearance; another span, 135-ft. vertical clearance with 600-ft. horizontal clearance over main channel, 261-ft. approach span on each end; second, steel structure, fixed span, with 640-ft. horizontal clearance and 150-ft. vertical clearance, 380-ft. approach spans at each end, trestle over drawbridge, at Wando Channel, having 240-ft. horizontal clearance, and vertical clearance of 135-ft.; 20-ft. roadway on both structures; Shortbridge & Hardesty, of Waddell & Hardesty, 150 Broadway, Bridge Engrs.; Maj. J. Frank Sullivan, Consist. Engr., both New York City.

S. C., Sumter—State Highway Dept., J. W. Barnwell, Engr., Columbia, prepared plans for bridge over Atlantic Coast Line tracks at Mannington Ave.; first plan: 225-ft. concrete structure with approaches, parallel with South Main St., from point opposite power house to point 400 ft. south of railroad tracks; 22 ft. 6 in. above tracks; 36-ft. roadway, two 6-ft. sidewalks; second plan: 330-ft. bridge with approaches, from point in center of triangle opposite power house, toward west, to point across tracks, with 2 roadways forking, one 44 ft. wide, with 36-ft. roadway for vehicles, to point about 400 from tracks on South Main St.; other 30-ft. roadway, to point about 400 ft. on Manning Ave.; C. F. Jones, Chmn.

Tenn., Etowah—See Roads, Streets, Paving.

Tenn., Knoxville—City, Service Director Mynatt, plans 30-ft. reinforced concrete bridge across First Creek at Main Ave.; replace present wooden and steel structure.

Tex., Austin—City, Adam R. Johnson, Mgr., receives bids Jan. 24 for reinforced concrete box culvert at Grooms and Thirty-third St., 4,800 lb. reinforcing steel; Orin E. Metcalfe, City Engr.

Tex., Del Rio—War Dept., Washington, D. C., reported, approved plans of Citizens Bridge Co. of Del Rio, for international bridge over Rio Grande River at Del Rio.

Tex., Fort Worth—City, E. O. Carr, Mgr., plans bridge across Lake Worth, cost \$350,000. See Financial News—Bond Issue Proposed.

Tex., Palestine—Anderson County Commrs., E. H. Shelton, County Judge, reported, granted permit to Austin Bridge Co., 1813 Clarence St., Dallas, to build toll bridge over Trinity River, near present site of Wild Cat Ferry.

Tex., Port Arthur—City Conn., J. P. Logan, Mayor, will request permit from War Dept., Washington, D. C., to build bridge over Sabine-Neches ship channel, connecting Port Arthur with pleasure pier; 150-ft. clearance from fender to fender, 30-ft. wide roadway, two 8-ft. walks; deck or through type; cost \$300,000. See Financial News—Bond Issues Proposed.

Tex., Presidio—Missouri, Kansas & Texas R. R. Co., F. Ringer, Ch. Engr., St. Louis,

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

Mo., plans bridge across Rio Grande River connecting Presidio and Ojinago, Mexico.

Tex., Richmond—Fort Bend County plans 2 bridges. See Roads, Streets, Paving.

Va., Hopewell—City, Roy S. Braden, Mayor, plans receiving bids in Feb., subject to approval of War Dept., Washington, D. C., for bridge across Bailey's Creek. 12-15

Va., Portsmouth—Norfolk County plans building and improving 6 bridges. See Roads, Streets, Paving.

W. Va., Bluefield—See Roads, Streets, Paving.

## Contracts Awarded

D. C., Washington—Arlington Memorial Bridge Comm., U. S. Grant, Third, Lt.-Col. Corps of Engrs., Executive and Distributing Officer, reported, let contract to North Carolina Granite Corp., Mt. Airy, N. C., for bridge carving: Bison heads, \$19,000; faces and battleaxes, \$42,000; for Arlington Memorial Bridge across Potomac River, between Lincoln Memorial and Arlington Cemetery; Hunkin-Conkey Construction Co., Cleveland, reported low bidder at \$1,576,886, for superstructure.

Miss., Vicksburg—Vicksburg Bridge & Terminal Co., Little Rock, Ark., Harry E. Bovay, Pres., 1743 N. Parkway, Memphis, Tenn., let contracts for Mississippi River Bridge at Vicksburg; U. G. I. Contracting Co., Broad & Arch St., Philadelphia, Pa., sub-structure for river spans; American Bridge Co., 208 LaSalle St., Chicago, Ill., superstructure for river spans and east end of bridge trestle, and superstructure for west approach trestle; Virginia Bridge & Iron Co., Madison Ave. N. E., Roanoke, Va., sub-structure for west approach trestle; J. A. Kreis & Son, 307 Burwell Bldg., Knoxville, Tenn., for embankment in west approach; Paul Wilder of Federal Securities Corp., 731 S. LaSalle St., Chicago, Ill., and R. C. Kellogg, reported, financing project; Harrington, Howard & Ash, Engrs., 1012 Baltimore Ave., Kansas City, Mo. 12-5

Okla., Pawhuska—Osage Construction Co., reported, has contract at \$32,000 for bridge over Sand Creek southwest of Bartlesville.

Va., Danville—City let contract to Atlantic Bridge Co., Inc., Jefferson Bldg., Greensboro, N. C., at \$250,000 for 1225-ft. concrete arch bridge at Worsham St., over Dan River; 28-ft. roadway; C. L. Scott, Jr., City Engr. 12-8

## Canning and Packing Plants

Ark., Blytheville—Chamber of Commerce, reported, interested in establishment of vegetable canning plant.

## Coal Mines and Coke Ovens

Tenn., Knoxville—Witherspoon Coal Co., 212 Dale Ave., capital \$10,000, incorporated; J. H. Anderson, T. P. Witherspoon, E. B. Davis.

Tenn., Memphis—McDonald Coal Co., Herman Bldg., increased capital, \$50,000 to \$100,000.

## Concrete and Cement Plants

S. C., Columbia—Standard Concrete Products Co., reported, consolidated with concrete pipe plants in North and South Carolina to be known as Carolina Concrete Pipe Co., general office at Charlotte, N. C., operating plants at Charlotte, Lilesville, N. C., and Columbia; officers of company are F. J. Blythe, Pres., 104 Crescent Ave., Charlotte; S. H. Clark, V.-Pres., Lilesville; W. Sinclair Stewart, Sec.-Treas., 705 Tremont Ave., Charlotte.

## Cotton Compresses and Gins

Miss., Blue Mountain—Tippah County Canning Co., Prof. J. J. McKinstry, Mgr., reported, interested in establishment of cotton gin.

S. C., Greenville—Anderson, Clayton & Co., Cotton Exchange Bldg., Houston, Tex., reported, acquired Piedmont Bonded warehouse and compress plant on Cedar Lane Rd.; will be operated under Greenville Compress Co., capital \$800,000, incorporated; J. V. Scott, Pres.; George J. Fromm, V.-P., both Houston, Tex.; will probably enlarge plant.

Tex., Denton—W. F. McKnight, reported, expend \$18,000 for erection of electrically operated gin.

Tex., Dickens—Peoples Gin will probably rebuild burned gin next summer.

## Drainage, Dredging and Irrigation

Fla., Stuart—St. Lucie River Inlet Comm., reported, let contract to United Dredging Co., 233 Broadway, New York, at \$396,585 for construction channel, 20-ft. deep, 200-ft.

wide; will open into Intercoastal canal; award recommended by Col. Gilbert A. Youngberg, Supvg. Engr., St. James Bldg., Jacksonville. 10-20

La., New Orleans—Roy Miller, Caller Bldg., active V.-Pres., Intracoastal Canal Assn., Corpus Christi, Tex., reported, will probably resume work on proposed canal which is to ultimately border gulf coast from the Mississippi to the Rio Grande; work now planned will begin in section between E. Galveston Bay and Plaquemine Bay via Morgan City; the intracoastal canal as at present authorized will extend from New Orleans to Corpus Christi; Capt. Louis A. Pick, U. S. District Engr.

Miss., Clarksdale—Cahoma County Drainage Comms., reported, let contract to Midland Construction Co., at \$12,492 for enlargement Hopson Bayou Drainage Dist. in Cahoma County, 95,000 yds. excavation. 12-22

Miss., Ripley—The Chancellor of Tippah County, Chancery Court, reported, authorized formation of North Tippah Bi-county Drainage Dist. in Tippah and Benton Counties, reclaiming farm lands.

Okla., Enid—Garfield County Comms., reported, let contract to W. R. Hardgrave for work required in changing channel of creek near Enid; F. W. Denner, County Engr.

Tex., Edinburg—Hidalgo County Water Control & Improvement Dist. No. 6, reported, has plant by Card & Parks, McAllen, for drainage system; 70 miles concrete lined canals, 37 miles concrete pipe lines, concrete siphons, pumping plants all included in system to irrigate about 23,000 acres in lower Rio Grande valley, known as the Goodwin tract. 12-8

## Electric Light and Power

**Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.**

Ala., River Falls—River Falls Power Co., reported, applied to Alabama Public Service Coms., Montgomery, for permission to construct auxiliary power plant, cost \$158,000; install modern equipment.

Fla., Fort Meade—Florida Public Service Co., Orlando, reported, acquired 20 acre site for substation.

Fla., Jacksonville—Jacksonville Water and Power Co., incorporated; E. L. Hill, Pensacola Casualty Bldg., C. L. Spencer, Ortega Blvd.

Miss., Hazlehurst—Copiah County Board of Supervisors, reported, granted 50-yr. franchise to Mississippi Delta Power and Light Co.; will construct power lines.

Mo., Jefferson City—Missouri Power and Light Co., reported, applied for 10 yr. electric franchise.

Mo., St. Louis—See Roads, Streets, Paving.

Okla., Arapaho—Southwestern Light & Power Co., Braniff Bldg., Oklahoma City, reported, has franchise for light and power; will extend line from Clinton to Arapaho.

Okla., Breckenridge—City, reported, voted electric franchise to Oklahoma Gas & Electric Co., Oklahoma City.

Okla., Douglas—Oklahoma Gas and Electric Co., Oklahoma City, reported, acquired light plant.

Okla., Grove—Public Service Co. of Oklahoma, 510 S. Boston St., Tulsa, reported, acquired town light, ice and water utilities.

Okla., Weleetka—See Water Works.

South Carolina—Halsey, Stuart & Co., Inc., Chicago, Pynchos & Co., Bonbright & Co., Inc., Spencer Trask & Co., all New York, are offering \$12,000,000 first mortgage 5% gold bonds, series due 1968 and \$5,000,000 5½% convertible sinking fund gold debentures due 1953 of Lexington Water Power Co., Lexington; company is constructing on Saluda River about 10 miles west of Columbia, at estimated cost of \$21,000,000, a hydroelectric power development, completion about Sept. 1930; dam will be about 1½ miles long with maximum height of 208 ft.; lake to be created will be 33 miles long, maximum width of 14 miles; power house will have an original installed capacity of 130,000 kw. and an ultimate aggregate capacity of 200,000 kw.

S. C., Allendale—City, reported, sold light and water plant to Edisto Public Service Co., Denmark; also granted 20 year franchise.

Tenn., Nashville—Suburban Power Co., increased capital \$125,000 to \$200,000.

Texas—Stone & Webster and Blodget, Inc.,

Chase Securities Corp., Brown Brothers & Co., and Blair & Co., Inc., all New York, are offering 30,000 shares of \$6 dividend preferred stock of Gulf States Utilities Co., Beaumont; company incorporated under laws of Texas, does entire electric lighting and power business in Beaumont, Port Arthur and vicinity; majority of ice business in Port Arthur entire electric lighting and power, ice and water in Orange; electric lighting and power, ice, gas and water in Lake Charles, La., and vicinity; electric lighting and power and ice in Jennings, La.; serves by transmission lines large agricultural area and number of smaller towns in Southern Louisiana and Southeastern Texas; proceeds to be used to provide additional capacity.

Tex., Briggs—Texas Power and Light Co., Dallas, reported, extend transmission line to Briggs.

Tex., Dallas—Mrs. Jessie F. Overton, South Dallas, reported, granted permit by Texas Board of Water Engrs., Austin, for development of power on Honey Springs Creek, construct 2 dams, divert 110 acre feet of water per year for power purposes and 44 acre feet per year to irrigate 22 acres land.

Tex., Fort Worth—City, reported, begin work soon on installation of white way on Magnolia Ave. and Camp Bowie Blvd.; C. A. Winder, Supervisor of Public Utilities.

Tex., Laredo—Central Power & Light Co., Frost Natl. Bank Bldg., San Antonio, is constructing generating station; concrete floors and concrete roof; install one 2500 kw. steam turbine with necessary boiler and auxiliary equipment; construction by company's forces; equipment purchased. 1-12

Tex., Marshall—City votes Jan. 31 on \$80,000 light bonds and \$150,000 sewers. See Financial News—Bond Issues Proposed.

Tex., Quanah—West Texas Utilities Co., subsidiary of Central and Southwest Utilities Co., 1100 Allen Bldg., Dallas, plans early construction on steam plant at Lake Pauline; first unit to be installed now will have 15,000 kw. capacity; when completed plant will be of three 15,000 kw.; portion of machinery for first unit purchased; substation with four 6667-kv. transformers will be built to place energy on line at 66,000 volts, generated at 13,800 volts; 4 transmission lines will connect plant with various parts of the system; interconnection will be made with other lines. Bids reported opened Jan. 20 for building. 11-10

Tex., Troup—Gulf Public Service Co., New Iberia, La., Lloyd Lattimore, Mgr., reported, plans installation of electric light line from Jacksonville to Troup.

Tex., Valley Mills—See Water Works.

Tex., Victoria—Central Power and Light Co., Frost Bldg., San Antonio, reported, plans improvements to system in 1928.

Va., Alexandria—Samuel Insull and associates, 72 N. Adams St., Chicago, Ill., reported, acquired National Public Service Co., 165 Broadway, New York, with plants in Charlottesville, Warrenton, Culpeper, Herndon, Arlington and Fairfax counties.

## Flour, Feed and Meal Mills

Fla., Sanford—H. B. McCall Industries, Inc., capital \$25,000, chartered; H. B. McCall, H. B. McCall, Jr.

Tenn., Gallatin—Sumner County Flour Mills, Inc., chartered; J. T. Ferguson, W. B. Douglass.

Tex., Temple—R. E. Wendland, Killeen, reported, acquired Childress Grain & Elevator Co.

## Foundry and Machine Plants

Md., Towson—Black & Decker Manufacturing Co., S. Duncan Black, Pres., has acquired The Van Dorn Electric Tool Co. of Cleveland, Ohio, manufacturers of portable electric tools, purchase includes complete tool equipment, inventories, land and all assets; each company will continue to operate under present management; Black & Decker Co. have branch plants in 17 cities in United States and Canada, warehousing and distributing plant on the Pacific Coast, manufacturing plant in Canada, and subsidiary Black & Decker Ltd. of Slough, Bucks, England, sales headquarters and distributing point for Great Britain and Continental Europe. 1-12

Mo., Kansas City—Galion Iron Works and Manufacturing Co., 1321 W. Ninth St., increased capital, \$1,500,000 to \$3,000,000.

## Gas and Oil Enterprises

Ark., Fort Smith—Border Gas Co., Earl N. Ward, C. R. Jones, 207 Belle St., reported, applied for 40 yr. franchise; complete gas line from Gans (Okla.) fields to Fort Smith.

Ark., Rogers—Southwest Power Co., McAlester, Okla., reported, construct \$250,000 substation at Diamond Springs; extend old building, construct new building of steel; Charles Stinson, supervising construction.

Fla., Lake Wales—West Coast Oil Co., incorporated; August Heckscher, J. S. Yarnell.

Fla., Ocala—Flesher Petroleum Co., incorporated; W. J. Flesher, C. W. DeLong.

Kentucky—Hambleton & Co., Baltimore, Md., Thompson Ross & Co., Chicago, Ill., and Hale, Waters & Co., Boston, Mass., are offering \$2,400,000 15-year collateral trust 6% gold bonds, Series A, of the United Public Service Co., 100 W. Monroe St., Chicago, Ill., a New Jersey corporation, owning all of capital stock (except directors qualifying shares), of United Public Utilities Co., Southern United Ice Co., and Southern United Gas Co., and control of Kentucky Power Co.; these subsidiaries furnish public utility service to 42 cities and towns in Kentucky, Fort Smith and Van Buren, Ark., and upon acquisition by one of subsidiaries of additional ice properties now under contract, will furnish ice service to 21 communities located principally in Tennessee, Mississippi and Louisiana.

Ky., Horse Cave—Wisconsin-Kentucky Oil and Gas Co., capital \$100,000, incorporated; John Salliet, John Foley.

Louisiana—Belchle and Laskey, Shreveport, reported, construct gas line supplying natural gas to 25 towns and cities in south central and southwestern Louisiana; approximately 240 miles long, cost \$6,000,000; will extend from Richland gas fields almost to the coast, will serve Lake Charles, Franklin, Opelousas, Lafayette; branch of line will extend from Lecompte through Bunkie, Abbeville, Erath, Rayne, Welsh and other interlying towns; franchises have been granted in number of towns; company wires: "Have not awarded any contracts on gas line as yet."

La., Alexandria—Mid-States Petroleum Co., Inc., 8th and Watkins Sts., is converting plant from light oil to lubricating plant; one 2-story galvanized, 40x70-ft. warehouse and one 1-story 25x32-ft. boiler house; install two 100-h.p. boilers, 40-h.p. engine, filter press, primary and secondary condensers, grease kettle and loading rack; cost of equipment \$20,000; pipe and loading rack to be installed at Georgetown. See Want Section—Machinery and Supplies.

La., Glenmora—Glenmora Petroleum Co., Inc., capital \$50,000, incorporated; Enoch M. Pringle, J. Webster Merchant.

La., Jennings—Belchle & Laskey, Inc., Slattery Bldg., Shreveport, reported, acquired 25 yr. natural gas franchise, subject to approval by people. 12-29

La., New Orleans—Commn. Council, reported, authorized natural gas survey by J. W. Billingsley, New Orleans, and Forstall, Robinson & Luqueer, New York.

Md., Baltimore—Auto Motor Fuel and Oil Co., Inc., 211 E. University Parkway, chartered; Arthur S. Baldwin, Stanley A. Baldwin.

Miss., Aberdeen—City, reported, granted 25 yr. gas franchise to Natural Gas and Fuel Corp., El Dorado, Ark., will construct distribution system.

Miss., Hattiesburg—Mississippi-Waskom Gas Co., increased capital, \$25,000 to \$50,000.

Mo., Kansas City—Standard Oil Co. will not have plans prepared or receive bids before latter part of April for rebuilding storage and distribution station 21st and Harrison Sts. 12-29

Mo., Kansas City—White Eagle Oil and Refining Co., Federal Reserve Bank Bldg., reported, planning merger with Independent Oil and Gas Co., Kennedy Bldg., Tulsa, Okla.

Mo., Poplar Bluff—City, reported, voted to grant gas franchise to Moody & Seagraves, Houston, Tex.

Oklahoma—Oklahoma Gas and Electric Co., J. F. Owens, V. P., Oklahoma City, reported, plans following work in 1928: completion of company's general office building; install third generating unit at Horseshoe Lake station, giving capacity of 87,500 h.p.; double capacity of Broadway substation.

Oklahoma—Central States Power and Light Corp., Davenport Iowa, reported, acquired Holdenville Gas Co., Okemah Gas Co. and Wetumka Gas Co.

Oklahoma, Arnett—C. E. Burlingame, reported, construct natural gas distribution system.

Oklahoma, Carnegie—Board of Trustees, reported, granted authority to George H. Lowerre, to construct and operate gas distributing system.

Oklahoma, Drummond—Oklahoma Gas and Electric Co., Oklahoma City, reported, negotiating for municipal electric light plant.

Oklahoma, Kingfisher—City, reported, votes Feb. 7 on granting gas franchise. Address The Mayor.

Oklahoma, Lovell—Earl W. Baker & Co., Medical Arts Bldg., Oklahoma City, reported, has contract for laying pipe line.

Oklahoma, Tulsa—Provident Royalties Corp., 204½ E. Third St., increased capital, \$700,000 to \$1,000,000.

S. C., Greenville—Subway Oil Co., incorporated; Pierce Van Vleck, Clarence Gapen, 12 W. Park Ave.

S. C., York—Town, reported, granted franchise to Great Northern Utilities Co., to establish gas plant.

Tenn., Knoxville—Volunteer State Oil Co., Atlantic and Erie Sts., P. O. Box 676, W. A. Dowler and A. H. Edington, will erect 40x80 ft. brick or concrete warehouse and office; pump house and bulk storage, 65,000 to 75,000 gals. capacity, brick or concrete; install tanks, trucks, etc.; cost of equipment about \$8500; contract for building not let; will open equipment bids Jan. 21. See Want Section—Bids Asked.

Tenn., Memphis—D. M. Clarke, Monroe, La., H. B. Snider, 208 S. La Salle St., Chicago, Ill., and Milton Binswanger, 655 Union St., Memphis, reported, interested in pipe line from Monroe, La., to Memphis.

Texas—Phillips Petroleum Co., Bartlesville, Okla., granted permission by Railroad Coms. of Texas, Austin, to construct and operate 3 plants for manufacture of carbon black from residue casinghead gas produced from oil wells in Panhandle of Texas in Carson, Hutchinson and Gray counties, together with machine shops, tool houses, warehouses, workmen's quarters, pipe lines, tramways, etc.; plant A in Hutchinson-Carson county to consume maximum of 50,000,000 and minimum of 20,000,000 cu. ft.; Plant B south of Pampa in Gray county, consume maximum of 25,000,000 and minimum of 10,000,000 cu. ft.; Plant C to be located as separate plant in Hutchinson county, consume maximum of 12,000,000 and minimum of 8,000,000 cu. ft.; plants to be complete and in operation in 6 months.

Texas—Sinclair Pipe Line Co., Sinclair Oil Bldg., Tulsa, Okla., reported, negotiating for Southern Pipe Line Co.'s holdings in West Texas.

Tex., El Paso—Standard Oil Co. of California, San Francisco, Cal., and 120 Broadway, New York, reported, construct through subsidiary company oil refinery and pipe line.

Tex., Fort Worth—Right of Way Oil Co., capital \$20,000, incorporated; J. C. McFarland, 2505 Fifth Ave.; L. B. Otey, 830 E. Jessamine St.

Tex., Galveston—Gulf Coast Dredging Co., reported, has contract for two 8-in. mains across Galveston Bay, for Galveston Pipe Line Co.; work to begin in about 3 weeks.

Tex., Houston—Roxana Petroleum Co., Shell Bldg., St. Louis, advises regarding construction of refinery on ship channel: "No definite decision made as to when this plant will be built, and no plans worked up." 1-12

Tex., Kermit—Gulf Production Co., Frick Bldg., Pittsburgh, Pa., reported, let contract to Chicago Bridge & Iron Works, 105th and Throop St., Chicago, Ill., for storage tanks in Hendricks field. 1-12

Tex., McCamey—United Producers Pipe Line Co., subsidiary of Transcontinental Oil Co., Tulsa, Okla., reported, making survey for tentative pipe line from Yates field in Pecos county to port of Texas City; 10-inch welded line; pump plants, etc.

Tex., San Antonio—Texas Petroleum Products Co., 912 S. Medina St., increased capital, \$30,000 to \$200,000.

Va., Clarendon—Washington Petroleum Products, Inc., 506 K St., N. W., Washington, D. C., reported, construct storage tank.

#### Ice and Cold-Storage Plants

Ala., Mobile—United Public Service Co., 100 W. Monroe St., Chicago, Ill., wires following regarding purchase of Southern Ice and Fuel Co., 710 S. Royal St., City Ice Co.; ice manufacturing facilities of Weinacker Ice & Fuel Co., Mary Lane; and controlling interest in Mobile Delivery Co., Commerce St.: "This company recently purchased three ice manufacturing plants in Mobile and for present will operate properties without much change from present conditions; plans for future improvement and development will be prepared by Geo. E. Wells, Consol. Engr., St. Louis, Mo., and New York; work will be started next fall."

Fla., Chipley—L. Tobias & Sons, reported, purchased building; remodel and install equipment for cold storage plant.

Fla., Orlando—Florida Cold Storage Co.,

W. O. Overstreet, Pres., reported, plans erecting cold storage warehouse, reinforced concrete, structural steel, brick walls, composition roof, cost approximately \$400,000; Lockwood, Greene & Co., Inc., Archts.-Engrs., Johnston Bldg., Charlotte, N. C., wires: "Florida Cold Storage Co. plans still in preliminary stage; no plans and specifications have been made."

Ga., Atlanta—Kingan & Co., Alabama St., J. M. Royal, Mgr., main office Indianapolis, reported, erect 110x159-ft. building on Peters St., reinforced concrete, brick, built-up roof; use for cold storage and refrigeration; J. L. Lewis, Engr., care of Kingan & Co., Indianapolis, Ind.

Ga., Atlanta—Georgia Power Ice Co., incorporated; B. T. Simpson, 305 E. Ponce de Leon Ave.; L. G. Mann, W. H. Wright.

La., New Orleans—Canadian Ice Co., reported, plans erecting ice plant, Gentilly St., 1 story, 60x120-ft., reinforced concrete and brick; approximate cost, including equipment, \$90,000; work under supervision of Irvin Pallet, Pres., Metalrie Ridge Ice Co., Metalrie Ridge.

Md., Baltimore—Arlington Ice & Fuel Co., Ass't B. Gardner, Pres., Benj. F. Lucas, Treas., incorporated to take over and operate the Zimmerman Ice Co.'s plant at Belvedere Ave. and Western Maryland Ry., remodel plant, install modern machinery, daily capacity 100 tons.

N. C., Wilmington—Wilmington Cold Storage Corp., capital \$250,000, chartered; T. S. Southgate, Fort Tazewell St., Norfolk, Va.; E. L. White, Oleander St.; Chas. B. Newcome, Masonic Temple Bldg., both Wilmington.

Ola., Weleetka—City Council, reported, plans enlarging ice plant, rebuild ice storage room.

S. C., Anderson—City Ice Co., S. Main St., E. F. Farmer, Sec.-Treas., will erect 30 ton capacity plant; 60x10 ft., brick and metal, concrete floors, built-up roof; install \$25,000 equipment furnished by the Frick Co., Waynesboro, Pa. 1-12

Tex., Houston—Roy J. E. Hicks has permit for \$10,000 ice plant, 1304 Telephone Rd.

Tex., Livingston—Livingston Ice Co., Inc., capital \$50,000, incorporated; J. L. Phillips, S. F. McDonald.

Tex., Victoria—Central Power and Light Co., First Natl. Bank Bldg., L. M. Levinson, Mgr., reported, plans increasing capacity of plant from 80 to 120 tons daily; replace present wooden ice vaults with brick and concrete structures, install new ice conveyor, equip with modern machinery.

#### Iron and Steel Plants

Ala., Alabama City—L. E. Geohegan, V. Pres.-Gen. Mgr., Gulf States Steel Co., Brown-Marx Bldg., Birmingham, Ala., advises work will begin at once, to be completed within 10 to 11 months, on improvement program at Alabama City plant; will install four 900 h.p. boilers, with necessary appurtenances; two 60,000 cu. ft. per min. turbo-blowers, electric generators, 10,000 K.W.H. capacity, together with condensers, water-supply reservoir and stand pipes, complete electrification of the drives on present rod mill; contract placed with Dwight P. Robinson & Co., Inc., 125 E. Forty-sixth St., New York City, who are to purchase and install equipment. 1-5

Ala., Fairfield—Tennessee Coal, Iron & Railroad Co., Brown-Marx Bldg., Birmingham, reported, will add 2 new stands of finishing rolls to sheet mill, increasing capacity by 1,000 tons sheet monthly; continuous reheating furnace will be built at structural mill and additional row of soaking pits constructed at blooming mill to furnish enough additional heating capacity to increase rolling capacities Fairfield mills.

#### Land Development

Ala., Mobile—Mobile Public Golf Assn., Inc., reported, interested in development of 35 acre golf course, erect clubhouse, shower baths, etc.

Ala., Mobile—Fearn & Willis, incorporated; George Fearn, Jr., Springhill, Ala., Richard M. Willis, 77 St. Francis St.

D. C., Washington—Michigan Park Manor Co., capital \$100,000, incorporated; Barney Robins, 1601 15th St., N. W., Wm. E. Bryant, 4606 13th St., N. W.

D. C., Washington—Old Dominion Dairy Farms, Inc., capital \$100,000, chartered; Linn Walker Searles, Chastleton Hotel, H. Spencer Herbine.

Fla., Green Cove Springs—Durham Tropical Land Corp., general office Green Cove Springs, J. C. Thorn, Pres., 2 E. 55th St., New York City; W. T. Vanderlipp, V.-P. and

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

Sec., 790 Broad St., Newark, N. J.; Thomas A. Wiley, Asst. Sec., Green Cov Springs; owns 50,000 acres farm land adjacent to J. C. Penney's development; road of standard size and construction 11 miles long has been constructed through center of property following lines between Clay and Putnam counties and connecting at Easterly end with new state highway No. 31; company is also developing farms in units of 20 acres cleared and improved ready for occupancy; has demonstration farm under way growing various Florida products, including potatoes, satsuma oranges, and a poultry farm of 2,000 leg-horn chickens; James D. Bourne, Jr., Mgr.; Fred Harries, Farm Director.

Fla., Miami—Bailey Bros. Co., Inc., chartered; H. F. Ward, 1311 Alhambra Circle; T. J. Lummus.

Fla., Miami—C. V. Floyd Fruit Co. incorporated; C. V. Floyd, LeJeune Rd.; E. R. Davis.

Fla., Miami—Hamilton Michaelson Co., 132 S. Miami Ave., incorporated; K. E. Michaelson, Hamilton Michaelson.

Fla., Miami—Calumet Realty Corp., incorporated; J. W. Usher, Jr., 600 N. W. 36th St., E. N. Horn.

Fla., Mount Dora—Mount Dora Groves Co., capital \$10,000, incorporated; C. Edgerton, James Simpson.

Fla., Orlando—Orient Investment Co., incorporated; A. J. Kramer, Minnie Burman.

Fla., Sarasota—Manasota Waterfront Corp., incorporated; G. A. Reiss, F. M. Horn.

Fla., Tampa—Barham-Harrison Co., capital \$30,000, incorporated; S. H. Clemmes, H. W. Telford.

Fla., Wauchula—Ratliff Holding Co., capital \$25,000, incorporated; S. S. Spencer, H. C. Crawford, Jr.

Fla., West Palm Beach—Roderick McNeil, Inc., chartered; R. C. McNeil, 818 Lytle St.; Mildred McNeil.

Ga., Savannah—Realty Development Co., reported, acquired 105 acres near White Bluff; will subdivide.

Ga., Waynesboro—City, reported, acquired tract for development of park. Address The Mayor.

Maryland—Kentsdale Realty Corp., Lyman B. Kendall, Pres., Bethesda, reported, acquired 581 acres; develop suburb of Kentsdale; improve streets; construct water and light system, etc.

Md., Baltimore—Park Board, George Leroy Nichols, Gen. Supt., plans improvements to parks, including grading, construction of road into Druid Hill Park, 24 tennis courts, enlargement of automobile picnic grounds in Herring Run Park, grading and planting old Mount Royal reservoir site, etc.

Md., Baltimore—Equity Guarantee Corp., Court Square Bldg., incorporated; John G. Mengel, Philip W. Kaitenbach, 3716 Elgin Ave.

Md., Baltimore—Western Building Co., 523 N. Kenwood Ave., incorporated; Joseph H. Neely, 2600 Oak St.; Clarence P. Bullinger.

Md., Cambridge—Dorchester Real Estate Co., incorporated; John E. Hurst, Wm. B. Hurst, Jr., and Emerson C. Harrington, Jr.

Miss., Clarksdale—Oakhurst Co., capital \$30,000, incorporated; L. C. Towne, N. B. Sessions.

Mo., St. Louis—Westborough Country Club, capital \$100,000, incorporated; W. L. Pfeffer, 240 Rosemont St., W. M. Warren, both Webster Groves; George Fogey, St. Louis.

N. C., Aberdeen—Blue Development Co., capital \$40,000, incorporated; W. A. Blue, Halbert J. Blue.

N. C., Asheville—S. S. Williams & Co., capital \$50,000, incorporated; S. S. Williams, W. O. Barnard, 414 Merriman Ave.

N. C., Kernersville—Kernersville Development Co., Dr. J. R. Paddison, Pres., reported, plans development; install water lines and streets.

N. C., New Bern—House Land Co., Inc., capital \$25,000, chartered; Edward Tucker, J. A. Gulon.

N. C., Raleigh—Civitan Club, R. C. Howison, Pres., reported, interested in development of golf course.

N. C., Washington—Beaufort Farm Co., capital \$100,000, incorporated; W. B. Rodman, Jr., A. D. MacLean.

Okl., Oklahoma City—Thomas E. Braniff, Third and Robinson Sts., and Frank Buttram, 601 West 14th St., reported, acquired 75 acres for developing subdivision.

S. C., Columbia—Twenty Creek Farms, Inc., Carolina Bank Bldg., incorporated; L.

W. Dickerson, 1308 Taylor St., W. D. Bates, 612 Woodrow St.

S. C., Columbia—Ideal Home Co., capital \$10,000, incorporated; J. J. Nettles, Jr., 309 Wollaman St.; M. R. Bagnal, 119 S. Edisto Ave.

S. C., Columbia—M. C. Heath, Loan and Exchange Bank Bldg., reported, develop Woodland Park subdivision.

Tenn., Chattanooga—Southern Landscape Forestry Co., incorporated; Robt. A. Jones, Karl R. Merton.

Tenn., Elizabethhton—Carter County Land Co., capital \$10,000, incorporated; W. M. Thomas, Clarence H. Miller.

Tenn., Memphis—Beth El Smith Jewish Congregation, reported, applied for permission to develop 10 acre cemetery on upper Horn Lake Rd.

Tex., Fort Worth—Ketrick Properties, Inc., capital \$10,000, incorporated; Lloyd H. McKee, Westover Rd.; T. C. Baker, 902 Canion St.

Tex., Fort Worth—Fred Strang Properties, Inc., capital \$175,000, incorporated; Fred Strang, F. O. Christopher.

Tex., Fort Worth—See Sewer Construction.

Tex., Fort Worth—J. D. Stephens, Cotton Exchange Bldg., and associates, reported, develop 300 acres for cottages and clubhouse.

Tex., Fort Worth—Worth Development Corp., capital \$225,000, incorporated; L. D. Ladd, Petroleum Bldg., George W. Polk, Rivercrest.

Tex., Houston—Bunz & Tyner Realty Co., incorporated; A. J. Bunz, W. S. Tyner.

Tex., Houston—James P. Weickersteiner, reported, acquired 35 acres on Goose Creek.

Tex., San Antonio—Scenic Loop Investment Co., R. R. Hoffman, reported, develop 221 acres on Prue Rd.; will develop.

Tex., San Antonio—LaWard Land Co., Inc., capital \$225,000, incorporated; H. C. Feldman, Brady Bldg.; Horace H. Day; develop LaWard townsite, fig orchard.

Tex., Scottsville—Verhalen Nursery Co., capital \$75,000, incorporated; S. J. Verhalen, R. P. Verhalen.

Tex., Sinton—Roy Jackson has 6000 acres; will develop 3000 acres for cotton and citrus fruit; erect about 20 farmhouses; 10 miles graded roads, etc.; expend \$200,000. 12-29

Va., Cherrydale—Loch Leven Estates, Inc., chartered; Howard H. Nusz, Baltimore, Md.; John L. Chapman, Jr., 977 15th St., N. W., Washington, D. C.

Va., Covington—Highland Orchard, capital \$40,000, incorporated; Henry F. Marriam, West Orange, N. J.; Edward I. Cullen, 45 Wall St., New York.

Va., Hopewell—Hopewell Realty Co., capital \$25,000, incorporated; H. H. Lavenstein, M. E. Lavenstein.

Va., Newport News—Otis & Collier, Inc., capital \$15,000, incorporated; C. R. Otis, 105 27th St.; W. J. Collier, 213 34th St.

Va., Norfolk—Myers Corporation of Washington, capital \$15,000, incorporated; R. Baldwin Myers, 317 E. Plume St.; J. Barbour Rixey, Gates and Claremont Ave.

Va., Norfolk—Powell Farms Corp., incorporated; Normal Bell, 326 Botetourt St.; T. L. Sawyer.

Va., Richmond—Moorefield and Blake, 20 N. Eighth St., reorganized; B. R. Dudley, Alfred L. Blake.

Va., Richmond—Universial Realty Corp., capital \$50,000, incorporated; M. L. Hubbard, 815 E. Franklin St.; M. M. Griffin.

## Lumber Enterprises

Ark., Pine Bluff—Standard Lumber Co., 407 E. Fifth St., reported, increased capital, \$225,000 to \$400,000.

Fla., Jacksonville—Terrell-Chiasson Lumber Co., capital \$25,000, incorporated; W. I. Terrell, F. L. Chiasson, E. S. Hemphill, Graham Bldg.

Ga., Savannah—Langford-Ellis Lumber Co., capital \$50,000, incorporated; W. J. Ellis, L. H. Quartermaster.

Miss., Jackson—Frank Paine and associates, reported, acquired 25 acre site near Bailey Ave., erect planing mill.

Okl., Altus—Rounds & Porter, main office Wichita, Kan., reported, plans rebuilding burned plant; brick and concrete, fireproof; plans designed at company headquarters; cost approximately \$250,000; Green Samuels, local Mgr.

Tenn., Memphis—Mid-South Lumber Co., incorporated; T. B. Quinn, U. & P. Bank Bldg.; Frank D. Quinn, 1940 Snowden St.; Ben C. Welch, U. & P. Bank Bldg.

Tex., Pritchett—Williams Lumber Co., incorporated; P. K. Williams, Moody Williams.

Tex., Pyote—Stahlam Lumber Co., Inc., capital \$30,000, chartered; H. I. Stahlam, Roy C. Moyston, Clint W. Murchison.

W. Virginia—W. W. Fain and associates, Nashville, Tenn., reported, acquired approximately 20,000,000 ft. timber bordering on waters Porters Creek, Bell Creek and Blue Creek, located in Clay, Nicholas, Fayette and Kanawha Counties, will develop.

## Metal-Working Plants

Tex., Houston—Sheet Metal Products—Burkhead Manufacturing Co., 1970 Harrington St., increased capital, \$125,000 to \$210,000.

## Mining

Ala., Florence—Contractors Rock Asphalt Co., capital \$275,000, incorporated; Tyler Calhoun, Pres., Florence; W. C. Beck, V.-Pres., Sheffield; John Wills, Sec.-Treas., 913 S. 40th St., Birmingham; plans developing asphalt mines.

Fla., Mims—Lugero Mining Co., capital \$100,000, incorporated; A. J. Stewart, G. S. Johnston, W. B. Kyser.

Mo., Cape Girardeau—Cape Silica Co., care of Dr. Scott, City Bank Bldg., Kankakee, Ill., building first unit of plant; work by own engineers; develop 232 acres; D. C. Smith, local Mgr., 1609 Broadway, Cape Girardeau.

Tex., Paisano, mail Alpine—Marble Mountain Co., E. A. Bruder, Pres.-Gen. Mgr., Los Angeles, Cal., leased marble quarries of Jordan Marble Co., San Antonio, reported, installing machinery and equipment for development.

## Miscellaneous Construction

Ala., Mobile—Seaboard Coal, 25 Broad St., main office New York, reported, plan establishing \$150,000 coal terminal on site known as old gulf department of Alabama Drydock and Shipbuilding Co., foot of Elmira St., facilities will include elevator type loading equipment, units for both transfer and storage of coal; plant to be ready for service in about 60 days.

Fla., Flagler Beach—Pier—Town Comr., reported, let contract to C. G. Varn, Woolworth Bldg., Daytona Beach, for construction fishing pier; extend 600 ft. into ocean with T 50 ft. long; creosoted piling.

La., Lake Charles—Wharf Sheds—Guy Beatty, Pres., Lake Charles Harbor and Terminal Dist., reported, receive new bids Jan. 23 for construction of proposed new steel wharf sheds at Lake Charles; one 736x139 ft. 2 in., second 300x70 ft., being enlargement of present shed No. 1 and third will be widening and lengthening of present shed No. 2; Elmer E. Shultz, Engr.

La., New Orleans—Board of Levee Comr., 201 New Courthouse Bldg., reported, receives bids Feb. 3 to furnish labor and material for driving round piling and installing flash boards to protect earth fill on southern shore of Lake Ponchartrain from West End to Seabrook; estimated quantities 3600 round piles, 450,000 ft. B.M. flash boards.

La., New Orleans—J. J. Clark & Co. has contract for re-covering Toulouse St. wharf shed.

La., New Orleans—Canal—See Drainage, Dredging and Irrigation.

Md., Baltimore—Plaza—City contemplates widening Bolton St. in front of Fifth Regiment Armory for proposed \$370,000 plaza; \$150,000 appropriated by State. Wm. F. Broening, Mayor.

Miss., Jackson—Crematory—City Comr., plan building crematory; receive bids Feb. 21; A. J. Johnson, City Clerk; Peter A. O'Brien, City Engr. See Want Section—Bids Asked.

Mo., St. Louis—Dock—City Plan Coms., reported, approves acquiring and beautifying river front property east of Third St., between Spruce and Franklin Ave.; also build elevated ramp eastward from Fourth to river front, ending in ornamental dock, providing parking space for 4000 automobiles on either side of ramp. See Roads, Streets and Pavings.

Okl., Blackwell—Mausoleum—Concrete work on mausoleum being constructed in I. O. O. F. Cemetery nearing completion; E. A. Bond, construction Engr.; contract for copper roofing awarded to American Cornice Co., Wichita, Kan.

Tex., Fort Worth—Subway—Riverside Civic League, J. B. Baker, Pres., and associates, interested in constructing subway at railroad crossing on E. Fourth St.

Tex., Mercedes—Incinerator—City Council, reported, let contract to Superior Incinerator Co., Wilson Bldg., Dallas, at \$37,000 for incinerator plant, has site.

Tex., Sherman—City Comsn., reported, contemplates installing garbage disposal plant; Dr. S. W. Williams, Dr. T. W. Crowder and associates interested in project.

### Miscellaneous Enterprises

Ala., Birmingham—Crawford Johnson & Co., Inc., 508 S. Twenty-second St., reported, erect 2-story and basement bottling plant at N. Eleventh and Thirty-third St., reinforced concrete and structural steel, brick, concrete floors; receive bids Feb. 1; D. O. Whillden, Archt., 515 N. 21st St. 5-1

Ala., Birmingham—McGough Bakeries Corp., T. A. McGough, Pres., 721-31 N. 26th St., advises, let contract to Smallman Construction Co., 1109 Ave. E., Birmingham, for erection new bakery; contracts for new equipment also awarded; work to begin at once; W. E. Long Co., Chicago, Ill., Engrs. and Archts. 1-12

Ala., Decatur—Decatur Ice Cream & Creamery Co., Bank St., reported, acquired adjacent site.

Ala., Mobile—C. J. Frankel, Electric Bldg., Houston, Tex., reported, has contract for erection plant for Star Fish & Oyster Co., 75x125 ft.

Fla., Fort Lauderdale—Williams Ice Cream Co., capital \$10,000, chartered; W. E. Williams, E. G. Williams, H. L. Williams.

Fla., Fort Myers—Mercantile—Gulf Stores Co., capital \$10,000, incorporated; W. O. McCollum, E. W. Watts.

Fla., Jacksonville—Vending Machines—Seminole Sales-Service Corp., chartered; W. C. Lynch, J. E. Finney, D. M. Hix.

Fla., Jacksonville—J. R. Hill Forwarding Co., incorporated; J. A. Grier, P. S. Grier.

Fla., Kissimmee—Arcade Provision Co., incorporated; H. Gilbert, V. B. Newton.

Fla., Lakeland—Marble Arcade Co. incorporated; E. J. Sparks, M. C. Talley.

Fla., Miami—Purity Food Products Co., incorporated; J. D. Tamboer, W. P. Rademan.

Fla., Miami—Miami Stationery Co. incorporated; A. Skagseth, 1520 N. W. Second St.; C. M. Strange, Crystal St.; Norman Johansen.

Fla., Miami—Construction—Porter V. Skinner, Inc., chartered; P. V. Skinner, V. D. Kerns, A. Skinner.

Fla., Miami—C. H. Perry Construction Co., incorporated; C. H. Perry, 43 S. W. Second St.; Cleona H. Perry.

Fla., Orlando—Jackson Drug Co. incorporated; C. E. Jackson, H. C. Stutz, S. E. Durance.

Fla., St. Petersburg—Southern Packing Co., reported, plans establishing pectin manufacturing plant on Nineteenth St.; cost approximately \$10,000.

Fla., Sarasota—City, C. E. Rowland, Chrmn. Board of Public Works, reported, let contract to American-LaFrance Fire Engine Co., Inc., Elmira, N. Y., for 1000-gal. pumper truck.

Fla., Tampa—Imperial Upholstering Co., capital \$20,000, incorporated; R. E. Cox, 302 N. Westland Ave., A. T. Stuart, 608 Tampa St.

Fla., Tarpon Springs—Sparks Lumber and Construction Co., capital \$50,000, incorporated; W. R. Sparks, L. R. Sparks, Rilla M. Sparks.

Fla., West Palm Beach—Amusements—West Palm Beach Artists Music Assn., capital \$10,000, incorporated; D. F. Dunkle, B. J. Carlberg, both Guaranty Bldg.; D. H. Conkling, 703 Gardena St.

Fla., West Palm Beach—Plumbing—H. W. Thorpe, Inc., capital \$50,000, chartered; H. W. Thorpe, W. S. Richardson, Comean Bldg.; M. W. Thorpe.

Fla., West Palm Beach—Merchandise—West Palm Beach Market, Inc., chartered; W. D. Fagon, Jr., Belvedere Rd.; H. V. Miller, J. H. Parratt.

Ga., Atlanta—United Engineers & Constructors, Inc., Dwight P. Robinson, Pres., main office, Broad and Arch Sts., Philadelphia, Pa., formed by combining of The U. G. I. Contracting Co., Philadelphia, Pa.; Public Service Production Co., Newark, N. J.; Dwight P. Robinson & Co., Inc., New York City and Day & Zimmerman Engineering & Construction Co., Philadelphia.

Ga., Buford—Bona Allen, Inc., reported, will rebuild burned chrome tannery plant; loss \$175,000.

Ky., Lexington—John G. Epping Bottling Works, Inc., 57981 East Third St., contemplates installing new bottle washer.

Ky., Louisville—Linker Cigar Co., 133 S. Sixth St., reported, acquired C. C. Bickel Co., 432 W. Main St.; will move equipment to building adjoining plant on Sixth St.

Ky., Louisville—Interstate Lighting Equipment Co., capital \$20,000, incorporated; F. A. C. Tocque, 113 N. Galt St.; S. C. Tocque, Edw. G. Klemm, Inter-Southern Bldg.

Ky., Stanford—Farmers Supply Co., capital \$13,750, incorporated; J. O. Newland, B. W. Givens, A. R. Matheny.

La., Baton Rouge—Wilson Music Co., capital \$85,000, incorporated; T. E. Swann, Wm. Howard Beasley, 3700 Dartmouth St., both Dallas, Tex.; H. C. Wilson, 2158 Wisteria St., Baton Rouge.

La., Crowley—Crowley Implement Co., Inc., capital \$25,000, chartered; Homer E. Koon, Crowley; W. J. Boyd, Corpus Christi, Tex.

La., Lafayette—J. Roy Comeaux, reported, awarded contract for erection creamery plant for Lafayette Creamery, Inc., J. R. Jeamard, Pres.; G. B. Knapp, Archt. 1-12

La., Monroe—Mercantile—Monroe International Co., Inc., capital \$25,000, chartered; Godfrey S. Williams, Monroe; S. E. Doster, New Orleans.

La., Monroe—Dixie Creameries, Inc., C. Ford, Mgr., 2419 Southern St., Shreveport, reported, plans establishing \$100,000 creamery.

La., New Orleans—Trico Coffee Co., Inc., 203 Magazine St., increased capital, \$10,000 to \$25,000.

La., Shreveport—Mercantile—The Winter Co., Inc., capital \$120,000, chartered; Mrs. L. V. Winter, S. S. Weisman, 534 Herndon St.

La., New Orleans—Du Bos School Supply Co., Inc., capital \$10,000, chartered; Henry S. Riecke, 2437 S. Carrollton St.; Clarence Du Bos, 6142 Catina St.

Md., Baltimore—Mercantile—L. J. Appel Sons, Inc., 1012 S. Third St., chartered; L. F. Appel, 3711 Fait Ave.; John J. Appel, Lena Schlee.

Md., Baltimore—Western Maryland Dairy Corp., Geo. S. Jackson, Pres., and Fairfield Farms Dairy, Charles R. Bowman, Pres., will be consolidated, capitalization represent about \$13,500,000; Charles R. Bowman probably control company and become president and active head.

Md., Baltimore—Upholstered Furniture—Chesapeake Manufacturing Co., Simon Land, Pres., Sharp and Barre Sts., reported, plans erecting 2-story brick addition.

Md., Baltimore—Clothing—Baltimore Uniform & Clothing Co., 28 S. High St., capital \$50,000, chartered; Samuel Cohen, Charles Glass, Rose Glass, 1537 N. Smallwood St.

Md., Baltimore—Colonial Printing Co., 128 Light St., capital \$25,000, chartered; L. Edward Wolf, E. Russell Wolf, Calvert St. Apt., Leon E. Young.

Md., Baltimore—Cash and Carry Gasoline Corp., Munsey Bldg., Incorporated; Forrest Bramble, Henry L. D. Stanford, Jr., F. Fulton Bramble, all 07 N. Calvert St.

Md., Baltimore—U. S. Cleaners and Dyers, Inc., 1032 Druid Hill Ave., chartered; Jacob Schulman, 1403 E. Pratt St., Tanhum Glushakow, 112 S. Eighth St., David Lipsitz.

Mississippi—Merger of Kraft Cheese Co., 402 Rush St., Chicago, Ill., and Phenix Cheese Co., 345 Greenwich St., New York City, reported; change name to Kraft-Phenix Cheese Co. with Jason F. Whitney, Pres., New York; James L. Kraft, Chmn. of Board, Chicago.

Miss., Wiggins—O. L. Bond, Pine St., will erect 1-story, 22x40-ft. building, cost \$10,000; install \$15,000 equipment for printing plant; receiving bids. See Want Section—Machinery and Supplies.

Mo., Kansas City—Merchandise—Guy Manufacturing Co., 1429 Madison St., capital \$10,000, incorporated; James Guy, 1429 Madison St.; Mary Guy, Lawrence Strauss, 5525 Wornall Rd.

Mo., Kansas City—Confections, etc.—Gordon-Howard Co., capital \$50,000, incorporated; H. R. Brandt, 6515 Summit St.; M. C. Brandt, Russell Maloney, 416 Scarritt Bldg.

Mo., Kansas City—W. A. Rosenthal X-Ray Co., 412 E. Tenth St., incorporated; M. W. Rosenthal, W. A. Rosenthal, M. Levinson.

Mo., Kansas City—The Merchandising Co., capital \$10,000, incorporated; M. W. Borders, Jr., C. Roach, Jr., both 615 Commerce Bldg.; D. L. Brenner.

Mo., Kansas City—Road Machinery—The Victor L. Phillips Co., 1600 Baltimore Ave., increased capital, \$100,000 to \$150,000.

Mo., Kansas City—Ready Mixed Concrete Co., capital \$80,000, incorporated; T. J. Pendegast, 1908 Main St.; Wm. A. Ross, 209 Uptown Bldg.; Edw. L. Schneider, 3425 Park Ave.

Mo., Kansas City—W. A. Ross Construction Co., 209 Uptown Bldg., capital \$100,000,

incorporated; T. J. Pendegast, Wm. A. Ross, Edward L. Schneider.

Mo., Kansas City—Charles Eneu Johnson Printing Ink Co., Tenth and Lombard Sts., Philadelphia, Pa., reported, erect ink manufacturing plant at 2613 Southwest Blvd.; 2-story and basement, 60x115 ft.; soon begin construction; install \$100,000 machinery.

Mo., Kansas City—Traffic Lights—City, reported, contemplates installing traffic lights at 28 additional street corners; H. F. McElroy, City Engr.

Mo., Poplar Bluff—E. R. Funk of the Funk Chick Hatchery Co., reported, leased building to establish hatchery; first machine to have capacity of 15,000 eggs.

Mo., St. Joseph—Mooney Transfer and Storage Co., Incorporated; Ethel May Mooney, Paul J. Osborn, Charles R. Mooney.

Mo., St. Louis—Superior Hardwood Floor Co., 3915 Shaw St., capital \$10,000, incorporated; Frank W. Hughes, Russell Walker, Jr.

Mo., St. Louis—Standard Hotel Co., capital \$10,000, incorporated; John A. Bromsick, Geo. J. Siemer, Ernest Boughner.

Mo., St. Louis—Vollmar-Figge Drayage Co., Inc., capital \$50,000, chartered; Clark E. Vollmar, 3884 Nersho St.; Clyde J. Vollmar, Wm. A. Figge, 523 Lansdown St.

Mo., St. Louis—St. Louis Paper Can and Tube Corp., chartered; W. P. Hicks, Webster Groves; Edw. G. Platt, Merchants-Laclede Bldg., St. Louis.

Mo., St. Louis—General Weatherstrip Co., incorporated; Alfred M. Lane, 4738 Lafayette St.; John A. Goellner, 4729A Anderson St.; Harry C. Albrecht.

Mo., St. Louis—Seymour Schiele Advertising Co., capital \$10,000, incorporated; Ernest R. Evans, Seymour Schiele, Louis Brunswick.

Mo., St. Louis—Merger, reported, of Harris-Polk Hat Co., 1221 Washington Ave., with Keith Bros. & Co., 330 S. Franklin St., Chicago; double present output; obtained additional space; install new machinery.

Mo., St. Louis—Heating System—Baumgartner & Tooen, Inc., capital \$10,000, incorporated; Wm. H. Otten, Arthur H. Baumgartner.

Mo., Springfield—Central Creameries, Inc., capital \$10,000, chartered; T. W. Mackworth, F. C. Sumrall, 1415 S. Fremont St., O. W. Stinson.

N. C., Apex—Disinfectants, etc.—Apex Chemical Co., M. W. Blades, Sec., advises, for the present will re-arrange and install small machinery. 1-12

N. C., Asheville—Drugs—Brown Supply Co., capital \$100,000, incorporated; R. Waugh, Pine Woods Rd., Robert Morris, Thomas L. Crownover.

N. C., Asheville—Radio and Accessory Stores, Inc., capital \$100,000, chartered; W. M. Grigsby, Kenilworth Rd., C. G. Parhamore, W. A. Smith.

N. C., Brevard—Houston Furniture Co., capital \$100,000, incorporated; A. H. Houston, A. O. Houston, both St. Petersburg, Fla.; J. W. Lyday, Brevard.

N. C., Canton—Champion Fibre Co., Reuben Robertson, Pres., main office Hamilton, Ohio, reported, expend \$200,000 during 1928; construct steam plant and purchase of additional machinery and equipment.

N. C., Charlotte—Todd-Thrower Tile Co., capital \$100,000, incorporated; T. A. Henry, R. L. Todd, H. T. Thrower.

N. C., Charlotte—Ansley Garment Co., capital \$25,000, incorporated; L. Buchman, J. Buchman, both Asheville; E. Berger, Waynesville, N. C.

N. C., Charlotte—Porter Construction Co., Independence Bldg., capital \$100,000, incorporated; John M. Porter, E. E. Porter, A. M. Porter.

N. C., Charlotte—Southern Chain Theatres, Inc., capital \$100,000, chartered; E. D. Turner, R. H. Masterman.

N. C., Drexel—Drexel Furniture Co., incorporated; L. T. D. Cox, Drexel; F. O. Huffman and C. E. Kistler, both Morganton.

N. C., Durham—City, reported, contemplated installing additional fire fighting equipment. Address City Clerk.

N. C., Forest City—Forest City Hatchery, reported, rebuild hatchery, burned at loss of \$5,000.

N. C., Goldsboro—Furniture Products, Inc., capital \$100,000, chartered; Geo. C. Royall, Kenneth C. Royall, G. C. Royall.

N. C., Hendersonville—Mercantile—Gordon's, Inc., capital \$25,000, chartered; G. J. Gordon, Hendersonville; S. H. Gordon, Brunswick.

N. C., Laurinburg—Rhodes Hardware Co., capital \$10,000, incorporated; Clyde H. Har-

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

ris, Geo. T. Rhodes, Laurinburg; N. D. Stewart, 1027 Euclid Ave. N. E., Atlanta, Ga.

N. C., Lexington—Carolina Upholstery and Novelty Co., capital \$100,000, incorporated; H. C. Davis, Henry Beck, Mrs. Lizzie Davis.

N. C., Littleton—Mercantile—Moore-Smith Co., capital \$25,000, incorporated; Mamie M. Moore, C. G. Moore, H. C. Smith.

N. C., Monroe—Monroe Coca Cola Bottling Co., Inc., W. Harvey Morrison, Mgr., let contract to Moody Construction Co., Albemarle, N. C., at \$15,000, for 2-story, 50x85 ft. building; equipment furnished by Liquid Carbonic Co., 3100 S. McKenzie Ave., Chicago, Ill. 1-5

N. C., Mount Airy—West-Hill Overall Co., reported, plans installing additional machines, increasing output.

N. C., Raleigh—International Harvester Co., 6065 Michigan Ave., Chicago, Ill., reported, established headquarters of an assembly, sales and service plant at 410 S. Salisbury St.; plans conducting service shop in basement of building and probably erect assembly plant; entire line of the International Harvester Co. will be represented; W. T. Bailey, Jr., in charge; I. B. Dawson, Chicago, southern Dist. Mgr.

N. C., Sanford—Grocery—J. T. Davenport & Sons, Inc., capital \$100,000, chartered; J. T. Davenport, Sr., T. D. Davenport, J. T. Davenport, Jr.

N. C., Shelby—Funeral Home—Lutz & Jackson, Inc., capital \$20,000, chartered; L. A. Jackson, R. E. Lutz.

N. C., Southport—Georgia-Carolina Naval Stores Co., Inc., capital \$40,000, chartered; J. H. Young, B. N. Willis, both Southport; J. M. Willis, Ocilla, Ga.

N. C., Wilmington—Royal Bakery, Inc., capital \$50,000, chartered; Louise H. Fox, J. B. Fox, Sunset Park, Mrs. Louis F. McDaniel.

N. C., Winston-Salem—Quality Cleaners, Inc., capital \$50,000, chartered; Luther C. Bruce, 2710 S. Main St., Mrs. L. C. Bruce, E. V. Bennett.

Okl., Bartlesville—Western Creameries, Inc., chartered under laws of Delaware, Wayne Moore, Gen. Mgr., Bartlesville; reported, formed by merger of Santuary Ice Cream & Butter Co., Independence, Mo.; Crystal Creameries, Bartlesville; Bennett Ice Cream Co., Cherryvale, Kan.; probably install additional machinery, etc.

Okl., Enid—DeCoursey Creamery Co., 644 Northrup Ave., Kansas City, and Wichita, Kan., reported, plans erecting 50x125-ft. plant cor. Hemlock and N. Grand St., total cost including equipment \$80,000. 11-24

Okl., Enid—Northwest Ready Roofing Co., Omaha, Neb., reported, plans establishing branch at 315 S. Grand St.

Okl., Gate—Quaker Products Co., Weightman Bldg., Philadelphia, Pa., reported, purchased 80 acres deposit volcanic ash, will develop; manufacture "Kansas Household Cleanser," for cleansing enamelware, refrigerators, tinware, etc.

Okl., Oklahoma City—Blue River Play Grounds, Inc., capital \$10,000, chartered; Charles McQuity, 619 E. 13th St.; H. N. Knight, 607 E. 15th St.; A. E. Kull, 1205 W. Park St.

Okl., Oklahoma City—Following sub-contracts awarded for construction wholesale bakery by the C. J. Patterson Corp.; brick, United Clay Products Corp.; steel, J. B. Klein Iron and Foundry Co., 1006 W. Second St.; cement, Standard Roofing and Material Co., 525 W. Main St.; lumber, Long Bell Co., 903 W. Grand St., all Oklahoma City. 12-8

Okl., Okmulgee—E. B. James Candy Co., capital \$10,000, incorporated; E. B. James, B. L. James, both Okmulgee; M. E. Bond, Oklahoma City.

Okl., Prague—City, H. W. Hartman, Mayor, plans installing fire fighting equipment. See Want Section—Machinery and Supplies.

Okl., Tulsa—American Plumbing Co., capital \$15,000, incorporated; F. T. Brannon, Susie Brannon, Mildred T. Hansen.

Okl., Tulsa—Gene Cash Stores Co., capital \$15,000, incorporated; Herbert Barall, 1501 S. Norfolk St.; Nathan Gens, 1108 E. 21st St.; J. N. Barall.

Okl., Tulsa—Union Transportation Co., 322 S. Cheyenne St., increased capital, \$250,000 to \$500,000.

Okl., Tulsa—Dexter Publishing Co., 1118 S. Boston St., reported, purchased Tulsa Daily Legal News; will consolidate.

Okl., Tulsa—C. L. Haynes Paint and Wall Paper Co., 109 E. Second St., capital \$10,000, incorporated; C. L. Haynes, E. E. Hunt, W. L. Eagleton.

S. C., Greenville—Piedmont Paint Manufacturing Co., capital \$50,000, Hugh K. Aiken, Pres., Chicago, Ill., A. S. Farmer, V-Pres.

Anderson; reported, acquired warehouse on Laurens St. facing Reedy River, remodel for paint manufacturing plant; equip with most modern machinery.

S. C., New Brookland—Hite's Novel Sign Co., D. I. Hite, Gen. Mgr., reported, plans enlarging plant, located on Columbia-Lexington Rd.; double capacity.

Tenn., Chattanooga—Electric Refrigeration Co., capital \$25,000, incorporated; E. R. Howard, 109 E. Seventh St., J. H. McDowell, 2007 E. 14th St., Frank S. Darwin, James Bldg.

Tenn., Cookeville—Cookeville Printing Co., increased capital to \$20,000.

Tenn., Elizabethhton—Elizabethhton Steam Laundry, capital \$10,000, incorporated; Adam B. Crouch, Joe P. McCormick, Edwin G. Crouch.

Tenn., Kingsport—Southern Ice Cream Co., reported, soon begin construction \$75,000 ice cream plant corner Cherokee and Market St., 1-story brick building, install most modern equipment.

Tenn., Knoxville—Printing—W. L. Warters Co., 715 S. Central St., reported, plans addition to rear of building, 40x15-ft. 2-story, brick.

Tenn., Memphis—Johnson Brothers Toilet Co., capital \$10,000, incorporated; J. G. Johnson, J. S. Johnson, H. L. Johnson.

Tenn., Memphis—Memphis Optical Dispensary, Inc., Exchange Bldg., increased capital, \$10,000 to \$15,000.

Tenn., Nashville—Triangle Stores, Inc., chartered; V. J. Rotter, 1021 Monroe St.; J. W. Lanier, 44 Carroll St.; Robert F. Fehr.

Tenn., Nashville—Neuhoff Packing Co., Henry Neuhoff, Pres., 1308 Adams St., reported, expend \$40,000 improvements; Foster & Creighton, Contr., Fourth and First Bldg., Nashville; Henschein and McLaren, Archts., 1637 Prairie Ave., Chicago, Ill.

Tenn., Nashville—Dyer Fruit Box Manufacturing Co., capital \$100,000, incorporated; H. D. Hayes, C. H. Ewell, R. W. Ewell.

Tenn., Rogersville—The Hub, Inc., capital \$10,000, chartered; J. T. McConnell, C. W. Margrave, Ernest McConnell.

Texas—International Chemical Co., Inc., S. D. Benoliel, Gen. Mgr., Mascher and Lehigh Ave., Philadelphia, Pa., advises, do not contemplate establishing plant in Texas, as recently reported. 1-5

Tex., Amarillo—Earle Wyatt Stores, Inc., capital \$25,000, chartered; Earle Wyatt, Clifford Dillard, Ed Congleton.

Tex., Ballinger—Runnels County Co-operative Creamery, capital \$10,000, incorporated; W. B. Currie, C. W. Lehmborg, Sam Behringer.

Tex., Brownwood—Ray Morgan, reported, has permit to erect battery plant; approximate cost \$18,000.

Tex., Carthage—F. W. Kazmier, of Sunshine Hatcheries, Inc., Bryan, Tex., reported, plans establishing chain of hatcheries, probably select site in both Carthage and Longview. 1-12

Tex., Dallas—Oliver Construction Co., Inc., chartered; J. K. Oliver, 108 E. Eighth St.; W. A. Wade, Fidelity Bank Bldg.

Tex., Dallas—England's Electric Shop, Inc., J. M. England, Pres., 1901 Elm St., reported, plans erecting \$60,000 building on Live Oak St. near Cantrell St.; receive bids within two or three weeks; Flint & Broad, Archts.

Tex., Denton—Brooks Dairy, Inc., capital \$10,000, chartered; T. R. Brooks, J. A. Orr.

Tex., Denton—P. D. Dunkle, Supt., Texas Agricultural Experiment Station, Sub-station No. 6, plans rebuilding burned laboratory and office, money to be appropriated by State; install equipment. See Wants Section—Machinery and Supplies. 1-12

Tex., El Paso—El Paso Building Material Co., 2910 Durazno St., increased capital \$50,000 to \$100,000.

Tex., Fort Worth—Rock Products Corp., capital \$15,000, chartered; A. P. Haddix, 4711 El Campo St.; S. V. Evans, 5116 Byers St.; Austin F. Anderson, 609 May St.

Tex., Fredericksburg—Butter, Ice Cream, etc.—Fredericksburg Co-operative Creamery, Inc., Alfred Neffendorf, Sec., let contract to H. Kuenemann for 38x48-ft. building, brick, tin roof, cement floor; install \$15,000 machinery, coolers, churns, freezers, vats, etc.; portion of equipment furnished by Ben E. Cabel. See Want Section—Machinery and Supplies. 1-5

Tex., Galveston—Galveston Rice Milling Co., P. H. Wilson, Mgr., reported, acquired property of Seaboard Rice Milling Co. (plant has been under lease) will continue operations.

Tex., Galveston—American Printing Co., capital \$50,000, incorporated; W. L. Moody, Jr., 2028 D. St., Shearn Moody; establish printing plant in American National Insurance Annex.

Tex., Galveston—Family Washing Co., capital \$60,000, incorporated; W. A. Johnson, C. J. Michaelis, R. W. Goodman.

Tex., Galveston—Model Linen Supply Co., incorporated; W. A. Johnson, 2727 J St., R. W. Goodman, 3124 Q St., C. J. Michaelis, 2827 J St.

Tex., Galveston—Galveston Model Laundry, capital \$198,000, incorporated; W. A. Johnson, 2727 J St., C. J. Michaelis, 2827 J St., R. W. Goodman, 3124 Q St.

Tex., Galveston—Ideal Dry Cleaning Co., capital \$96,000, incorporated; W. A. Johnson, 2727 J St., C. J. Michaelis, 2827 J St., R. W. Goodman, 3124 Q St.

Tex., Greenville—T. W. Terry of Thordale and M. B. Bailey, Cameron, reported, acquired Celeste Courier, will publish.

Tex., Houston—L. K. Pump Valve Co., incorporated; Louis H. Kennon, Lowell J. Jangdon, Clyde Eads, 1122 Walsh St.

Tex., Houston—Mayfair Publishing Co., capital \$50,000, incorporated; Allen V. Peden, W. A. Kirkland, 1302 Bertha St.

Tex., Houston—Rein Printing Co., Buffalo Drive, plans erecting new plant, Joseph Finger, Archt., Keystone Bldg. 12-29

Tex., Houston—C. J. Frankel, Electric Bldg., reported, has contract for erection steel frame building at Commerce and Buffalo Drive, to be occupied by Rogers Asbestos Co., 25 N. Live Oak St.

Tex., Laredo—Hamilton Hotel Co., increased capital \$285,000 to \$385,000.

Tex., McAllen—Cardwell Glendinning Building Co., capital \$26,000, incorporated; J. T. Cardwell, H. B. Glendinning.

Tex., Mineral Wells—Snowwhite Creameries Co., capital \$30,000, incorporated; C. E. Turner, E. F. Wagley, H. C. Vandervort.

Tex., Mission—Mission Provision Co., capital \$100,000, incorporated; J. E. O'Neil, F. E. Gerth.

Tex., San Antonio—Duplex Machine Co., capital \$20,000, incorporated; Warren W. Winkler, Builders Exchange Bldg.; L. A. McDonald, Earl F. Wood.

Tex., San Antonio—Texas Klean Rite Auto Laundries, Inc., capital \$10,000, chartered; Hannon Faust, Edwin Kurze.

Tex., San Antonio—City Comm. rejected bids for construction hot house at Brackenridge Park; receives new bids Jan. 23. 12-15

Tex., San Antonio—Busby Building Corp., L. S. Busby, Pres., Woodlawn Place, increased capital \$50,000 to \$100,000.

Tex., San Antonio—Crockett Hotel, Inc., capital \$30,000, chartered; Frank W. Paton, 127 Delaware St., Flora E. Stoner, Ed. T. Lyons, 201 Adams Et.

Tex., San Antonio—Fleischman Yeast Co., care of W. A. Williams, 1303 W. Commerce St., reported, let contract to L. T. Wright & Co., 910 Builders Exchange Bldg., at \$28,817, for building, Hoefgen and Carolina St., 1-story, 53x114 ft., brick, wood trusses, concrete foundation; Louis L. Tielem Co., Archts., W. E. Simpson Co., Engrs., National Bank of Commerce Bldg.

Tex., San Marcos—A. A. Zumker, reported, has contract for erection creamery building for Hayes County Farmers Dairy Products Co., 1-story, 50x70 ft., reinforced concrete, hollow tile and stucco; plumbing and electric wiring; David C. Donaldson, Archt. 12-29

Tex., Temple—Temple Seed and Floral Co., capital \$21,000, incorporated; E. A. Buehrin, R. C. Albert.

Tex., Waco—Hilltop Baking Co., incorporated; Geo. D. Jones, G. S. Jones, J. W. Carnegie.

Tex., Wichita Falls—Humphrey Printing Co., incorporated; Frank Humphrey, 2004-B Taft St., Roy B. Jones, 406 Morningside Dr.

Tex., Winters—Winters Pure Breed Seed Co., capital \$15,000, incorporated; J. D. Smith, Ben Spill.

Tex., Wichita Falls—James Brothers Creamery Co., 110 Chester St., increased capital \$30,000 to \$40,000.

Va., Abingdon—Town Council, reported, plans purchasing additional fire-fighting equipment from American-La France Fire Engine Co., Inc., Elmira, N. Y.

Va., Charlottesville—Clothing—Kaufman's Sons, Inc., capital \$35,000, chartered; Mortie Kaufman, E. D. Jeffries, Sol Kaufman.

Va., Coeburn—Coeburn Hardware and Furniture Co., Inc., capital \$10,000, chartered; J. F. Lay, C. D. Lay, W. W. Lay.

Va., Danville—Danville Theaters, Inc.,

chartered; A. C. Conway, 218 W. Main St.; J. C. Hester, 157 Virginia Ave., both Danville; I. Weinberg, Lexington.

Va., King and Queen—J. D. Hutchinson, County Agent of King William and King and Queen counties, and associates interested in establishing both creamery and cheese factory.

Va., Louisa—Electric Heaters—Gilmer Manufacturing Corp., chartered; Lee M. Watchell, Savannah, Ga.; W. B. Gilmer, B. M. Gilmer, both Louisa.

Va., Norfolk—Toys, etc.—Cuthrell Co., Inc., capital \$25,000, chartered; P. M. Cuthrell, C. L. Williams, L. L. Cuthrell.

Va., Richmond—Drugs, etc.—Charles E. Frost & Co. (U. S. A.), Inc., capital \$50,000, chartered; Ralph T. Catterall, Guy B. Hazlegrove, both American Natl. Bank Bldg.; V. B. Hawkins.

Va., Richmond—Richmond Orange Crush Bottling Corp., chartered; J. Douglas Gordon, Jennie A. Gordon, M. deG. Hobson, 2018 Monument Ave.

Va., Richmond—Cleaners—Rainbow Service Corp., capital \$50,000, chartered; Wm. F. Ayres, Cape Charles; W. E. Peters, Richmond.

Va., Richmond—Trade-Marks, etc.—American Engineering and Siphon Corp., capital \$200,000, chartered; A. L. Lacy, C. N. Allen, both 12 W. Brookland Pk. Blvd.; T. M. Kennerly, Bon Air, Va.

Va., Richmond—Apartment & Home Heating Corp., capital \$55,000, chartered; A. O. Silver, R. P. Graves, 1511 S. Meadow St., L. M. Krouse, 615 E. Main St.

Va., Roanoke—Virginia Minerals Corp. of Roanoke, incorporated; Abram P. Staples, C. Simpson, both Boxley Bldg.

Va., Roanoke—Roanoke Sign Works, Inc., capital \$15,000, chartered; K. W. Inge, 107 Gullford Ave., Grandin Ct., J. W. Inge, Jr., 508 Stratford Pl.

Va., Salem—Furniture—Sterchi Brothers & White, Inc., capital \$25,000, chartered; J. G. Setrchi, Knoxville, Tenn.; W. C. White, Salem.

Va., Salem—Merchandise—Terry-Ferguson, Inc., capital \$20,000, chartered; J. C. Terry, Chalmers Ferguson.

Va., Salem—Roanoke Caverns, Inc., chartered; Van R. H. Sternbergh, W. T. Norris, H. M. Sternbergh.

Va., Strasburg—Strasburg Laundry Corp., capital \$25,000, chartered; Harry L. Borden, Douglas F. Spangles, H. L. Hottel.

W. Va., Charleston—Union Carbide and Chemical Co., 30 E. 42nd St., New York, reported, expend \$7,000,000 during 1928 in expansion of plant facilities at South Charleston; erect manufacturing plants on Blaine's Island on property acquired last year.

W. Va., Gassaway—Stanley P. Dowdy, Sec., Chamber of Commerce, interested in establishing creamery; wants information on operation, etc. See Wants Section—Miscellaneous.

W. Va., Fairmont—Jewelry—Fanus Co. of Fairmont, 111 S. Third St., capital \$100,000, incorporated; B. H. Fanus, Fred L. Morris, Ralph Watkins.

W. Va., Glenville—Merger of the Glenville Democrat and Glenville Pathfinder, reported, to be published by Glenville Democrat; C. W. Marsh, owner.

W. Va., Matewan—Matewan Bottling Co., capital \$10,000, incorporated; J. F. Davis, Arthur Davis, John C. Malden.

W. Va., Milton—Eureka Art Glass Co., reported, plans additions and improvements to plant; also erect new factory building.

#### Motor Bus Lines and Terminals

Ala., Mobile—Louisville & Nashville R. R. Co., W. H. Courtenay, Ch. Engr., Louisville, Ky., reported, applied for permit to operate two bus lines between Mobile and Biloxi; other plans for 1928 include building yards and shops at State docks location, costing approximately \$1,000,000.

Ga., Waycross—A. Norman Highsmith of Waycross Transit Co., has 30-year franchise to operate street bus lines.

Tenn., Dyersburg—Smith Motor Coach Co., 144 N. Front St., Memphis, reported, leased King Bldg. on E. Market St., remodeling for terminal; operates Blue Bird Line between Dyersburg and Memphis.

Mo., St. Louis—Yellowway of Missouri, Inc., capital \$12,500, incorporated; H. G. Curre, 205 N. Ninth St.; J. E. Earp, 1507 Menard St.

Mo., St. Louis—Mound City Service Co., capital \$50,000, incorporated; W. H. Walter, 5028 Devonshire St., L. G. McDermith, 2716 Sidney St.

Tenn., Memphis—Edward M. Salomon, 1851 Vinton St., and associates interested in establishing central bus terminal.

Va., Greensboro—Danville-Greensboro Bus Co., reported, plans extending bus line to Richmond.

W. Va., Huntington—A. R. Jamerson, Barboursville, W. Va., reported, purchased franchise of the Huntington-Louisville Bus Line; will operate; use two 16-passenger parlor busses.

#### Motor Cars, Garages, Filling Stations

Ark., Magnolia—W. J. Mitchell, reported, will occupy 40x110-ft. garage, erected by D. D. Goode and associates.

Ark., Magnolia—John Spradlin, reported, will occupy garage to be erected by D. D. Goode and associates.

Fla., Orlando—American Tire Co., Inc., 401 W. Central Ave., increased capital to \$15,000.

Fla., Tampa—Arnold S. Kirkeby, Pres. of Chicago-Tampa Development Co., 200 West Shore Drive, and of Kirkeby-Watts, Inc., 105 S. La Salle St., Chicago, Ill., reported, acquired Snow Park filling station.

Fla., West Palm Beach—Charlie's Auto Service, Inc., capital \$10,000, chartered; C. H. Eccleston, 834 Upland Rd., Esther Eccleston, Alice Eccleston, 535 Jessamine St.

Ga., Atlanta—Gillespie Auto Laundry System, Inc., erect 228x200-ft., 1-story building, steel, brick, tile, limestone and wood; concrete floor, cost \$78,000; install \$15,000 equipment; Raymond C. Snow, Inc., Archt., Bona Allen Bldg. 21-15

Ga., Atlanta—Anderson & Majors, Jacksonville, Fla., has contract for painting and E. F. Hauserman Co., Detroit, Mich., for metal partitions for plant of Chevrolet Motor Company at Atlanta. 1-5

Ga., Atlanta—Gordon Burdett, care of Consumers Ice Co., 252 W. North Ave., reported, erect 1-story and part basement garage on Cain St.; fireproof, concrete and steel, construction by day labor; A. F. N. Everett, Archt., Candler Annex.

Ga., Savannah—R. J. Whalley, Inc., has contract at \$11,994 for erection service station for E. S. Richardson, 411 E. Liberty St., 1-story, 60x100 ft., brick, steel truss, steel sash, concrete floor, Barrett roofing, work begun; C. W. Bergen, Archt., Liberty Bank and Trust Bldg. 1-5

La., Shreveport—Henry Vatter Garage, Inc., chartered; Henry Vatter, 723 Kirby Pl., N. B. Stoer, Slattery Bldg.

Md., Baltimore—Madison Star Motors, Inc., North and Madison Ave., capital \$25,000, chartered; Sam Markman, 2129 Bolton St., Russell J. Riley, Earle W. Riley, 2614 Huntingdon Ave.

Md., Baltimore—Automobiles—Steinmetz Co., Calvert Bldg., incorporated; Huntington Cairnes, John W. Avirett, 2nd, Leslie E. Mihm, 12 Elmwood Ave.

Md., Baltimore—Overton Chevrolet Co., Inc., Belair Road, capital \$20,000, chartered; John S. Overton, J. LeRoy Hopkins, F. L. Grubel.

Miss., Brookhaven—Marx Motor Co., capital \$25,000, incorporated; Jos. Marx, Florence Marx.

Mo., Independence—Garvey-Chevrolet Co., reported, occupy building Maple Ave. and Lexington St.; to be erected by Aaron Randall; 75x75 ft.; brick, concrete and steel; equip for service, sales and show room.

Mo., Kansas City—Phil A. Russell, Inc., incorporated; Phil A. Russell, 6229 Summit St., T. R. Crawford, 5612 Garfield St.

Mo., Kansas City—Schurtz System Sales Co., capital \$10,000, incorporated; W. A. Ferguson, 270 Glover Bldg., M. L. VanMetre, 8304 Summit St.

Mo., Kansas City—Sharp Automotive Specialty Corp., capital \$10,000, chartered; Firman L. Carswell, 12th and Kansas Ave., Fred Sharp, Fred Clark.

Mo., St. Louis—Igor Motors, Inc., capital \$10,000, chartered; C. M. Reide, W. O. Reeve, 1827 Russell St.; S. C. Igor, 1000 N. Hill Drive.

Mo., St. Louis—Mendenhall Motor Co., care of W. J. Mendenhall, 2315 Locust St., reported, plans 1-story, 136-ft. front, garage and sales room alteration; plate glass, metal store fronts, terra cotta and brick work, structural iron, reinforced concrete; Wm. P. McMahon, Archt., 719 Budde Bldg.

N. C., Durham—Griggs Sales Co., increased capital \$10,000 to \$25,000.

N. C., North Wilkesboro—Garage—C. D. Coffey & Sons, Inc., capital \$500,000, chartered; C. D. Coffey, Sr., C. D. Coffey, Jr., C. S. Coffey.

N. C., Raleigh—See Miscellaneous Enterprises.

Okl., Drumright—Miles Motor Co., capital \$25,000, incorporated; M. P. Springer, 700 Osage Dr.; Neal D. Sutherland, 1516 S. Cincinnati St., both Tulsa.

Okl., Duncan—Duncan Auto Sales Co., capital \$50,000, incorporated; E. P. Halliburton, Los Angeles, Calif.; Ben Owen, Memphis, H. C. Allen, Duncan.

Tenn., Chattanooga—Treece Auto Laundry, 1512 McCallie Ave., has permit for addition.

Tenn., Chattanooga—Sam A. Conner, 500 Orr St., has permit for \$20,000 garage, 521 Broad St., brick and concrete, fireproof; F. A. Fleming Co., Contr.

Tenn., Johnson City—Dunlop Tire and Rubber Co., Buffalo, N. Y., reported, establish factory warehouse branch at Main and Division St.; Matt Dickey, Mgr.

Tenn., Memphis—B. F. Holmes, 156 Madison St., has permit for brick garage, 107 E. Iowa St.

Tex., Austin—C. M. Bartholomew, reported, plans erecting tire station, Sixth and Lavaca Sts.; 40x80 ft., reinforced concrete, brick walls, hollow tile, steel frame windows, plate glass; Page Bros., Archts., 348 Austin Natl. Bank Bldg.

Tex., Beaumont—Beaumont Motor Co., capital \$50,000, incorporated; Harry L. Polard, Bertha B. Roane, James F. Roane.

Tex., Big Spring—Walter Deats and associates will occupy \$25,000 garage to be erected on Scurry St.; 100x140 ft., fireproof.

Tex., Brady—Norman Co., reported, plans erecting garage and sales building, 1-story, 95x120 ft., with basement 30x55 ft., brick, reinforced concrete and steel; complete plans about Feb. 1; Beverly W. Spillman, and Beverly W. Spillman, Jr., Archts. and Engrs., Alamo Bank Bldg., San Antonio.

Tex., Dallas—American Filling Co., Inc., chartered; Frank L. Tomlinson, Parker V. Lucas, Republic Bank Bldg.

Tex., Houston—Detering Concrete Tile Co., 3016 Washington St., reported, has contract to furnish concrete tile for construction new \$10,000 Randell Garage, Heights Blvd. and Center St., J. B. Ette, 712 Cortlandt St., for brick.

Tex., Houston—Alex Clark Motor Car Co., 901 San Jacinto St., increased capital \$75,000 to \$100,000.

Tex., Houston—Geo. F. Howard, has permit for \$15,000 auto laundry plant on Main St.

Tex., Houston—Dan Japhet, 704 Jefferson Ave., has permit for erection \$30,800 automobile sales agency, San Jacinto St.

Tex., Luling—Walker Brothers, reported, erect 1-story, 90x90 ft. automobile sales building, brick, wood trusses, concrete foundation; Herff & Jones, Archts., S. C., Loan and Trust Bldg.

Tex., Midland—Kuykendall Motor Co., capital \$20,000, incorporated; C. I. Kuykendall, L. E. Girdley.

Tex., San Antonio—Baker Hotel Corp., Houston St., reported, erect 2-story addition to building at St. Mary's and Travis St., brick and tile; served by ramps; cost \$45,000; Herbert S. Green, Archt., 408 Alamo Natl. Bank Bldg.

Tex., White Deer—Motor Supply Co., increased capital \$10,000 to \$30,000.

Va., Harrisonburg—R. E. Tutwiler Motor Co., Inc., capital \$10,000, chartered; R. E. Tutwiler, L. A. Cupp, O. B. Shank.

Va., Herndon—Herndon Garage, Inc., capital \$50,000, chartered; Charles R. Huffard, Dennis J. Smiter.

Va., Warrenton—Garrett Motor Co., Inc., capital \$25,000, chartered; E. M. Garrett, W. E. Coons, both Warrenton; E. L. Childs, Casanova.

Va., White Stone—White Stone Hudson-Essex, Inc., capital \$20,000, chartered; H. R. Humphreys, Ocean, Va.; C. W. Hubbard, Sr., G. R. Dunton, Jr., White Stone.

Va., Williamsburg—Person Motor Corp., capital \$25,000, chartered; C. J. Person, W. L. Person, A. S. Person.

W. Va., Bluefield—Reid-Hornbrook Motors, Inc., capital \$25,000, chartered; O. E. Reid, F. L. Wilmot, John R. Hornbrook.

#### Railway Shops and Terminals

Okl., Guthrie—The Atchison, Topeka and Santa Fe Ry. Co., H. W. Wagner, Ch. Engr., Topeka, Kan., advises plans for proposed machine shop at Guthrie not complete. 1-12

Tex., Waco—Missouri-Kansas-Texas R. R. Co., F. Ringer, Ch. Engr., Dallas, Tex., reported, expend \$50,000 for installation of additional machinery in rail shops.

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

## Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

## Proposed Construction

Alabama—State Highway Comm., Woolsey Finell, Highway Director, Montgomery, receives bids Feb. 14 for paving in 3 counties; Geneva County—10,500 sq. yd. plain cement concrete pavement in town of Samson; Coffee County—15,000 sq. yd. plain cement concrete pavement in Enterprise; Covington County—7,410 sq. yd. plain cement concrete pavement in Opp.; plans on file; W. A. McCalla, State Highway Engr.

Ala., Huntsville—State Highway Comm., Woolsey Finell, Highway Director, Montgomery, plans Huntsville-Fayetteville road to Tennessee State line; W. S. McCalla, State Highway Engr.

Ala., Mobile—Mobile County Board of Revenue, Arthur D. Davis, Chmn., plans hard-surfacing 200 mi. county highways; also 18 county roads; concrete bridges, including Chickasabogue, Dog River and Three Mile Creek. See Financial News—Bond Issue Proposed.

Ark., Bentonville—Board of Commrs. Street Improvement Dist. No. 6, John Applegate, plans spending \$10,000 to grade, drain, curb and pave School St., Twelfth St. to Bentonville grammar school.

Ark., Gurdon City—W. W. Stone, Mayor, plans street paving in business section.—See Financial News—Bond Issue Proposed.

Ark., West Helena, Ind. Branch, Helena-City plans paving Plaza St., from First to Sixth St.; North Fourth St., from Plaza to Baldwin Ave.; E. R. Badinell, Engr.

Ark., Yellville—Marion County, Bob Berry, Judge, plans building roads into Rush, connecting with State highways.

Florida—State Road Dept., F. A. Hathaway, Chmn., Tallahassee, received low bids for 22 roads and 6 bridges, totaling \$2,057,754; Gadsden County—10 miles concrete, Road No. 1, M. C. Winterburn, Inc., Graham Bldg., Jacksonville, \$213,838; 9.77 mi. concrete, Road No. 1, Morgan Hill Paving Co., Woodward Bldg., Birmingham, Ala., \$222,346; Levy County—8.91 mi. rock base, surface treated, Road 13, Duval Engineering & Contracting Co., Dyal Upchurch Bldg., Jacksonville, \$100,336; Lake County—3 mi. rock base, surface treated, Road 2, T. B. McGahey Paving Co., 2115 N. Miami Ave., \$41,816; Osceola County—12.52 mi. grading, etc., Road 24, A. D. Weeks, Kissimmee, \$50,204; 11.83 mi. grading, Road 24, Everglades Construction Co., N. W. 25th Ave., Miami, \$104,821; Holmes County—9.09 mi. grading, Road 39, C. G. Kershaw Contracting Co., Woodward Bldg., Birmingham, Ala., \$44,483.

In Osceola County—12.62 mi. grading, Road 24, A. D. Weeks, \$75,727; Holmes County—8.58 mi. grading, Road 39, C. G. Kershaw, \$40,908; Hillsborough County—6.18 mi. grading, Road 17, Franklin Construction Co., Apalachicola, \$35,083; Road 17, same work, E. F. Powers Construction Co., Citizens Bank Bldg., West Palm Beach, \$86,477; Polk County—8.91 mi. grading, Road 17, Gilbert & Hadcock, Newberry, \$51,488; 10.26 mi. grading, Road 2, Little & Lee, Orlando, \$57,488; 11.22 mi. grading, Road 17, B. Booth, Green Cove Springs, \$53,198; 8.34 mi. Road 17, Little & Lee, \$42,163; Palm Beach County—8.04 mi. sheet asphalt, Road 4, R. G. Lassiter & Co., Comean Bldg., Palm Beach, \$230,963; Collier County—9.4 mi. surface treated, Road 27, Phoenix Asphalt Paving Co., \$26,195.

In Leon County—5.31 mi. grading, Road 43, Franklin Construction Co., \$36,143; 11.1 mi. Road 66, Franklin Construction Co., \$69,804; Okeechobee County—11 mi. grading, Road 29, A. S. Elliott, Okeechobee, \$85,730; 6.68 mi. grading, Road 29, Everglades Construction Co., \$60,037; Escambia County—8.12 mi. grading and sand-clay surface; Road 1, Silas Gibson, Camp Walton, \$42,886; .14 mi. sand clay, Road 1, E. M. Chadbourne, Alachua County—457 ft. concrete bridge, Sutton Bros., Atlantic Nat'l Bank Bldg., Jacksonville, \$49,185; Levy County—1,333 ft. timber bridge, General Construction Co., 305 Morgan St., Tampa, \$39,091; Suwanee County—113 ft. concrete bridge, Sutton Bros., \$17,312; Hillsborough County—260-ft. concrete bridge, McBath & Co., St. Petersburg, \$39,362; Bay County—120-ft. timber bridge, H. W. Johnson, Panama City, \$15,748; Escambia County—668-ft. bridge, E. M. Chadbourne, J. L. Cresap, State Highway Engr. 12-15, 12-22.

Fla., Pensacola—Escambia County Commrs.

plan expending \$8000 to repair Lillian road; W. E. Wheat, County Engr.

Fla., Stuart—Martin County, J. R. Pomeroy, Clk., plans hard-surfacing Sewalls Point Road; cost \$55,000; oil county roads, cost \$20,000; voted bonds.

Fla., West Palm Beach—City, A. E. Parker, Mgr., plans expending \$10,527 for paving, and \$223,160 for sewer extension; Arthur S. Hobby, City Engr.

Georgia—State Highway Dept., John N. Holder, Chmn., Atlanta, plans letting contracts in April for several roads, including paving road in Turner County; paving roads from Marietta to Tennessee line; from Swainsboro to Piney Bluff; \$2,500,000 will be available; \$1,500,000 will be available in August for road building.

Ga., Jesup—Wayne County Commrs. plan building and paving roads in county; cost \$60,000. See Financial News—Bond Issues Proposed.

Ga., Perry—City, Mayor and Board of Aldermen, receive bids Jan. 25 for 3,800 sq. yd. one course concrete street pavement, 200 lin. ft. concrete curbing, 1,175 sq. yd. two course concrete sidewalks, 375 lin. ft. 15 and 18-in. concrete pipe; plans from S. P. Crowell, Clk., and Charles S. Vance, City Engr.

Ky., Ashland—Board of Public Works receives bids about Feb. 1 for \$250,000 street building; Wm. B. Harrison, Mayor.

Ky., Mount Olivet—Robertson County plans road from Bracken County line, through Mount Olivet, to Nicholas County line. Address County Commrs. See Financial News—Bond Issues Proposed.

Louisiana—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Feb. 23 to furnish gravel and build 3 roads: Sabine Parish—7,920 mi. Many-Texas Highway, from present gravel road, about 10 mi. from Many to point near Sabine River; Rapides Parish—3,873 mi. Alexander-Leesville Highway, from Vernon-Rapides Parish line to west end of bridge over Calcasieu River, near Hineson; Richland Parish—2,739 mi. Alto-Columbia Highway, from present gravel in Alto, to intersection with Mangham-Buchner road, west of Mangham; plans on file; Nicholls W. Bowden, State Highway Engr.

Louisiana—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Feb. 28 to furnish gravel and build 3 roads: East Baton Rouge Parish—3,896 mi. Scotland-Slaughter Highway, from point north of Baker to north of city limits of Zachary; Union Parish—7,616 mi. Marion-Huttsie Highway, from gravel road in Marion to Louisiana-Arkansas State line; Evangeline Parish—7,367 mi. Ville Platte-Washington Highway, from point on Ville Platte-Opelousas Highway, to existing gravel road at Evangeline-St. Landry Parish line; plans on file; Nicholls W. Bowden, State Highway Engr.

Louisiana—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, received low bid from McWilliams Co., Inc., and McWilliams Dredging Co., both Carondelet Bldg., New Orleans, for 14,350 mi. New Orleans-Baton Rouge Air Line Highway in Ascension and St. James Parishes; from Alexandria Contracting Co., Alexandria, at \$99,655, for 3,863 mi. concrete pavement, Bossier City-Conshatta Highway, Bossier Parish; from H. C. Vaughan, Benton, at \$19,801, for grading and drainage structures on Bossier City-Couchatta Highway.

La., Benton—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Feb. 9 to furnish gravel and build 14,148 mi. Plain Dealing-Haynesville Highway, Bossier Parish, from intersection of Palmetto St. and Bossier City-Asiana Highway, Plain Dealing, to Bossier-Webster Parish line at Bad Can Bayou, west of Sarepta, including Mot Spur, etc.; plans on file; Nicholls W. Bowden, State Highway Engr.

La., DeQuincy—City receives bids soon for \$60,000 paving work; J. B. McCrary Engineering Corp., Consit. Engrs., Atlanta.

La., Natchitoches—City Commrs. plan widening, vitrified brick paved, Front St., 12 ft.; cost about \$13,000; considering gravel driveway along lakeshore on Front St.

La., Winnfield—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, received low bid from J. C. Leathers, Evelyn, at \$45,000, for 6,629 mi. gravel Winnfield-Coffax Highway, Winn Parish; Nicholls W. Bowden, State Highway Engr. 12-22

Md., Baltimore—Bureau of Plans and Surveys, Wm. O. Atwood, Chmn., considering widening Washington Blvd. from bridge over Gwynns Falls to new western city limits, 32-ft. to 70 or 80-ft.; Nathan L. Smith, Highways Engr.; C. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Md., Baltimore—Board of Estimates approved plans to pave Wyman Park Drive, with sheet asphalt, from Remington Ave. to Charles St.; cost about \$54,300; Nathan L. Smith, Highways Engr.; C. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Md., Baltimore—City, Chas. F. Goob, Ch. Engr., and Nathan L. Smith, Highways Engr., plan expending \$1,000,000 during 1928 for sheet asphalt repairs on various streets; work to be divided among American Paving and Contracting Co., Montebello Ave., and B. & O. R. R., P. Fanigan & Sons, Inc., Harford Road and Twenty-fifth St., and Baltimore Asphalt Block and Tile Co., 1320 N. Monroe St.; Wm. F. Broening, Mayor.

Md., Baltimore—Board of Awards receives bids Jan. 24 to grade, curb and pave with 11,700 sq. yd. sheet asphalt on concrete base, streets in Cont. No. 449; Nathan L. Smith, Highways Engr.; Chas. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Md., Baltimore—See Miscellaneous Construction.

Miss., Belzoni—Humphreys County Board of Supvrs., A. R. Hutchins, Clk., receives bids Feb. 8 to improve or build 6,627 mi. State Trunk road between Yazoo City and Moorehead; 67,183 cu. yd. excavation and borrow, 23,757 lb. reinforcing steel; plans on file and from H. C. Dietzer, State Highway Engr.; C. E. Miller, County Engr.

Miss., Gulfport—City, Florence Cassibry, Clk., receives bids Jan. 26 for 52,000 sq. yd. paving, 12,600 sq. yd. concrete sidewalks, 25,000 lin. ft. concrete curb and gutter; 5,000 sq. yd. concrete driveways, 30,000 cu. yd. excavation, 10,000 lb. reinforcing steel, 5,910 lin. ft. 12, 15 and 18-in. sewer pipe, 12 manholes, 30 catch basins; plans from Engr. of Public Works; J. W. Milner, Mayor.

Miss., New Albany—Union County Board of Supvrs. plans 75 mi. additional gravel roads; cost \$400,000. See Financial News—Bond Issues Proposed.

Miss., Walthall—Webster County Commrs. plan road from Bellefontaine to connect with highway at Grenada County line, cost \$50,000. See Financial News—Bond Issues Proposed.

Mo., Jefferson City—City Commrs., C. B. Steer, Clk., plan improving McCarty St., Havana to Manilla; F. E. Ross, City Engr.

Mo., Joplin—City, O. P. Mahoney, Commr. of Streets and Public Improvements, considering 2,276 ft. one course concrete pavement, squeegee asphalt top, 6,950 sq. yds. concrete; S. P. Ashcraft, City Engr. 1-12

Mo., Pineville—City plans improving Highway No. 88 within limits of Pineville Special Road Dist. Address City Clk. See Financial News—Bond Issues Proposed.

Mo., St. Louis—City, Board of Public Service, receives bids Jan. 24 to improve 6 streets, re-build Enright Ave., Grand Blvd. to Vandeventer Ave.; construct relief sewers, Sec. B, Western Mill Creek Public Relief Sewers; installing white way on certain streets; plans on file; George J. Dietz, Supervisor Commr.

Mo., St. Louis—City, Board of Public Service, receives bids Jan. 31 to grade Odell St., re-build Euclid Ave. and Lucky St.; improve Taylor St.; plans on file.

Mo., St. Louis—City Plan Comm., reported, approved plan to improve river front, costing \$50,000,000: Double-deck 36 blocks of Third St., north to south, estimated cost \$19,000,000; acquire and beautify river front property east of Third St., between Spruce and Franklin St.; build elevated mall from Fourth and Market St.; estimated cost \$22,000,000; build elevated traffic-way along east end of river front; plaza from Spruce to Franklin, and double-deck parking space for automobiles; estimated cost \$9,000,000.

North Carolina—State Highway Comm., Raleigh, receives bids Jan. 26 for 12 roads, totaling 76.09 mi. hard surface, 29.47 mi. top soil or other types of dirt roads, bridge, underpass, paving and approach; cost about \$2,000,000: Beaufort County—1225-ft. bridge across Tar River at Washington, 108-ft. steel swing span, with two openings of 60-ft. each, cost \$300,000; Northampton County—4 mi. dirt, Route 40, Pleasant Hill to Roanoke Rapids; Bertie County—14.22 mi. hard surface, Route 342, Wilson to Chowan River; Chowan County—4.14 mi. concrete, Edenton to Chowan River; Wayne County—15.9 mi. hard surface, Route 40 to county line toward Newton Grove; 9.22 mi. concrete, Route 102, from Route 10 to Greene County line; Greene County—9.10 mi. concrete, Snow Hill to Wayne County line; Brunswick County—11.90 mi. sand-asphalt. Supply to point near Brunswick Station; Guilford County—4 mi.

dirt, Route 65, from county line to Stokesdale; Alamance County—paving Route 10, at Haw River under pass; Mecklenburg County—5.7 mi. concrete, Charlotte to Thrift; Forsyth County—15 mi. grading and structures, Route 65, from Route 60 to Guilford County line; Davie County—9.32 mi. concrete, Mocksville, west to county line; Polk County—8.49 mi. concrete, Saluda to Tryon; Chatham County—58 mi. approaches and fills to bridge across New Hope Creek, Route 90; Lester Ames, Ch. Highway Engr.

N. C., Asheville—Buncombe County Comms., considering hard surfacing Dula Springs road, from Dula Springs to Appalachian Scenic Highway, near Weaverville.

N. C., Manteo—Town plans street paving, cost \$10,000. Address Town Clk. See Financial News—Bond Issues Proposed.

Okl., Altus—City considering additional street paving. Address City Clk. See Financial News—Bond Issues Proposed.

Okl., Hobart—City Council receives bids soon for 4 blocks of sidewalks. Address City Clk.

Okl., Holdenville—State Highway Comm., Oklahoma City, approved plans of Hughes Creek and Okfuskee Counties for north and south highway through Holdenville from Bristow to proposed bridge across South Canadian River north of Atwood, to be built by city of Holdenville.

Okl., Lawton—State Highway Comm., Oklahoma City, considering hard-surfacing Highway No. 29, Comanche County, from Stephens County line to Lawton; Clark R. Mandigo, State Highway Engr.

Okl., Oklahoma City—City, E. M. Fry, Mgr., plans grading and 6700 sq. yd. sheet asphalt on Penn St.; cost \$32,750; B. M. Hart, Engr.

Okl., Oklahoma City—City, E. M. Fry, Mgr., received low bid from Western Paving Co., Trades National Bldg., for Warrenite bitumilithic surface on Randolph and Elizabeth Ave.; B. M. Hart, Engr.

Okl., Oklahoma City—City, E. M. Fry, Mgr., plans widening Classen Blvd. 10 ft. on west drive, between Eighteenth and Nineteenth Sts.; B. M. Hart, City Engr.

Okl., Sayre—Beckman County appropriated \$310,000 toward paving Highway No. 66 through county; will let bids soon. Address County Comms.

S. C., Anderson—State Highway Comm., C. F. Jones, Chmn., Columbia, plans paving Anderson-Clemson Road. Anderson County.

S. C., Anderson—State Highway Comm., C. F. Jones, Chmn., Columbia, plans letting contract in Feb. to pave Anderson-Clemson road, being link in cross-country road from Abbeville line to Oconee line, connecting Anderson with Sandy Springs, etc.

S. C., Belton—City plans street paving, cost \$25,000. Address City Clk. See Financial News—Bond Issues Proposed.

S. C., Lexington—State Highway Dept., C. F. Jones, Chmn., Columbia, plans improving 2 roads in Lexington County: Lexington-Leesville Highway, R. Courtney, Jr., Res. Engr., Batesville; New Brookland-Lexington Highway, D. H. Sullivan, Res. Engr., New Brookland.

Tenn., Chattanooga—City Comn., R. H. Crox, Commr. of Streets and Sewers, considering widening 6 ft. and hard-surfacing, Ringgold Road, within corporate limits; plans selling bonds; F. K. Rosamond, City Treas.

Tenn., Etowah—Etowah Department of Streets and Bridges plans expending \$100,000 for permanent improvements, including concreting Washington Ave. and Seventh St., building concrete bridge on Seventh St.; will let contracts soon.

Tenn., Johnson City—City plans additional street paving, including East Main St. extension to city limits. Address City Clk.

Tenn., Savannah—Hardin County Comms. Court plans building 6 roads totaling 80 mi.: From Alabama line at Robin Cossey Place, to Savannah, via Bruce Ellis Place, then to Wayne County line near Clifton, via Cerro Gordo and Swift; from Stout Place, near Duncan Landing, to connect with first stretch from Alabama line to Savannah; from Shiloh Park to Mississippi line, via Hamburg, Counce and Red Sulphur; from Satillo to Milledgeville, at McNairy County line; from Five Forks, near Satillo, to Henderson County line via Shady Grove.

Tex., Abilene—State Highway Comm., R. S. Sterling, Chmn., Austin, receives bids about middle of Feb. for 13.4 mi. paving, Bankhead Highway, east from west line of Taylor County; W. J. Von London, Res. State Highway Engr.; R. A. Thompson, State Highway Engr. See Financial News—Bond Issues Proposed.

Tex., Beaumont—City Comms., Ollie J. Boyd, Mgr., plans expending \$60,000 to pave 4 streets, including Buford, Franklin; will receive bids to pave Railroad Ave., College to Crockett St.; R. C. Black, City Engr.

Tex., Beverly Heights, Texarkana—Town, reported, plans street paving, cast \$100,000; E. Newt Spivey, Mayor. See Financial News—Bond Issues Proposed.

Tex., Brownsville—City Comn., plans paving Palm Blvd., between Jefferson St., and paving of Los Ebanos Division; 20-ft. paving on each side of 20-ft. parking in center; paving Thirteenth St. through to Lincoln, to be paved to Fourteenth St. at Summit filling station; plans raising and widening culvert at city resoca, Fourteenth St.; A. C. Hipp, Commr.

Tex., Dallas—Dallas County Comms., F. H. Alexander, Judge, plans northwest highway from Letot, north of Dallas, to Rhone, north of Fort Worth, on Wichita Falls pike; cost \$1,300,000. See Financial News—Bond Issues Proposed.

Tex., Edinburg—Hidalgo County, A. W. Cameron, County Judge, and Cameron County, Oscar C. Dancy, Judge, considering plan for junction of roads, providing cross-Valley system from Edinburg to Brownsville; paralleling highway through lower section of valley.

Tex., Fort Worth—City, O. E. Carr, Mgr., plans street improvement, cost \$1,500,000. See Financial News—Bond Issues Proposed.

Tex., Houston—City, W. A. Moore, Sec., received low bid from Uvalde Rock Asphalt Co., Frost Natl. Bank Bldg., San Antonio, at \$43,137 to pave Herman Drive, Main to Jackson St.; J. C. McVea, City Engr. 1-12

Tex., Houston—State Highway Comm., R. S. Sterling, Chmn., Austin, probably let contract in Feb. for 2 roads: Harris County—Grading and drainage structures, Highway No. 12, from Fort Bend County line to Rosenberg; grading and drainage structures Highway No. 6, from South Houston to Webster, and from Cypress to Waller County line; R. A. Thompson, State Highway Engr.

Tex., Palestine—City considering sidewalks around public square; Col. George A. Wright, Chmn. of Citizens Committee.

Tex., Port Arthur—City, J. P. Logan, Mayor, plans paving and asphalting every street. See Financial News—Bond Issues Proposed.

Tex., Richmond—Fort Bend County, W. I. McFarlane, Judge, plans 14,544 mi. grading and bridges, Highway No. 12, Richmond to Fort Bend County line, cost about \$85,000; also 2 bridges over 20-ft. span, cost \$17,000; Bertram Hedick, County Engr.

Tex., San Augustine—City plans paving main business streets, \$20,000 available; Lamar Acker, Nacogdoches, Engr.

Tex., Waxahachie—Ellis County Comms. plan graveling Waxahachie-Italy road between Five Points and Bell Branch.

Va., Norfolk—State Highway Comm., H. G. Shirley, Chmn., Richmond, plans receiving bids latter part of Feb. for Lynnhaven Inlet-Ocean View Blvd. along Chesapeake Bay and Atlantic Ocean fronts, forming about 50 mi. concrete loop from Norfolk to Virginia Beach and back into city via Cape Henry, Lynnhaven Inlet and Ocean View; C. S. Mullen, Ch. Highway Engr.

Va., Norfolk—City, I. Walke Truxton, Mgr., plans widening Bousch St. 20 ft. between Grace and York St.; Walter H. Taylor, Third, Director of Public Works.

Va., Portsmouth—Norfolk County Roads and Bridges Comm., considering improving 12 roads and 6 bridges, cost \$250,000: Reconstruct Westhaven Bridge; construct 300-ft. vehicular bridge, connecting Westhaven and Waterview; macadam Joliff Churchbroad; rebuild with macadam Craney Island Road; West Norfolk to Twin Pine Road; 100-ft. Dock Creek Bridge; Pig Point Road, connecting road to Pig Point with Bennett's Creek Road; surface Western Branch Bridge; re-surface West Norfolk Bridge; 1 mi. macadam Yadkin Road, connecting Yadkin Road with George Washington Highway; widening and surfacing Princess Anne Turnpike; improve Brandon Place, Fox Hall, Ingleside and Estabrook streets; repair Indian River Bridge; re-build Money Point Road; build 3 mi. Mount Pleasant Road; 1½ mi. Long Ridge and Whitomore Roads; connect Northwest Road with Bunch Walnuts causeway, Pleasant Grove Dist.; build 2 mi. Balachack Road; R. B. Preston, County Engr. See Financial News—Bond Issues Proposed.

Va., Portsmouth—State Highway Comm., H. G. Shirley, Chmn., Richmond, considering building road from Portsmouth to Suffolk or widening present road, and eliminating railroad grade crossing; C. S. Mullen, Ch. Engr.

Va., Richmond—City, R. Keith Compton, Director of Public Works, considering smooth-paving Cary St., Morris to Boulevard.

Va., Richmond—City, R. Keith Compton, Director of Public Works, appropriated \$100,000 for public improvements: \$50,000, open and grade streets; \$25,000 sewers; \$25,000, public utilities beneath Cary, Laurel and Marshall St.

Va., Stuart—State Highway Comm., H. G. Shirley, Chmn., Richmond, considering stone-chip surface on Stuart-Danville road; J. J. Cassidy, Res. Engr.; C. S. Mullen, State Highway Engr.

W. Va., Bluefield—City, Mgr. Bennett, plans paving Thorn St., resurfacing and widening Athens Road, and South Walker St., etc.; resurface Mercer St.; grade Ingleside Road, in city; build asphalt bridge across Virginian Ry.

#### Contracts Awarded

Fla., Hollywood—Langston Construction Co., 108 E. Central Ave., Orlando, has contract at \$1,111,000 for sidewalks and paving on Central Beach section and Lake section, Hollywood; 589,656 sq. yd.; 8-in. Florida rock compacted, waterbound and rolled paving; one course Portland cement sidewalks; 79,096 lin. ft. curbing.

Fla., Pompano—J. B. McCrary Co., Atlanta, Ga., reported, has contract to pave various streets.

Fla., Pensacola—Escambia County Comrs. let contract to J. A. and A. B. Mason, Atmore, at \$15,875, for 22 mi. grading, only, Molino-Atmore Highway, from Pensacola-Floromont Highway near Molino to Alabama line south of Atmore; W. E. Wheat, County Engr. Lately incorrectly noted contract for grading and hard surfacing.

Fla., Ocilla—Atlantic Bitumilithic Co., Washington, D. C., has contract for 1 mi. street paving, and sidewalks; John A. Henderson, City Clk. 10-6

La., Alexandria—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, reported, let contract to Southern Roads Co. Whitney Bldg., New Orleans, to repair and complete resurfacing with Warrenite bitumilithic mixture, Beauregard and Camp Stafford hospital roads, Rapides Parish.

La., Baton Rouge—City let contract to Southern Roads Co., Cangelosi Bldg., at \$35,264, to pave avenues in Kleinert Terrace, including storm sewers, 36,446 lin. ft. curbling, 6100 lin. ft. gutter, 9227 sq. yd. 5-in. concrete base, and 2-in. Warrenite bitumilithic surfacing; Powers Higginbotham, City Engr. 12-20

Miss., Forest—City, E. S. Palmer, Mayor, let contract to Merrill Engineering Co., Lamar Bldg., Jackson, for 12,500 sq. yd. vibrolithic (concrete) paving, vitrified clay pipe culverts, storm sewers; M. L. Culley, Engr., Jackson. 12-20

Miss., Hazlehurst—Board of Aldermen let contract to Southern Clay and Vitrified Brick Co., Birmingham, Ala., at \$16,805 to gutter and pave Estelle St. and Railroad Ave. with 2½-in. vitrified brick on 5-in. concrete base.

Miss., Vicksburg—Merrill Construction Co., H. J. Henegan, Engr., reported, has contract to pave National Cemetery Road.

Mo., Clayton—St. Louis County, Walter E. Miller, Clk., reported, let contract to Skrainka Construction Co., Security Bldg., St. Louis, at \$10,796, to improve Lincoln Ave. Natural Bridge to Jackson; at \$21,368 to improve Jackson Ave., from Lucas and Hunt roads to Kingsland Ave.

Mo., Kansas City—Jackson County Court, Independence, let contract to James Hendrix, 1928 E. Eighth St., at \$9995, for sidewalks on both sides of Woodland Ave. from Eighty-fifth St. to southern city limits.

Mo., Poplar Bluff—City let contract to Tidd & Cole at \$8719 to pave Sixth St. between Main and Lester. Address City Clk.

Ola., Oklahoma City—City, E. M. Fry, Mgr., let contract to Connelly Brothers, El Reno, at \$11,513 to pave and gravel Avenue F; B. M. Hart, City Engr.

Ola., Oklahoma City—City, E. M. Fry, Mgr., let contract to M. A. Swatek Co., 519½ W. Main St., for concrete paving on Potawatomo Ave., Lee to Hofer Ave., and widening McKinney Ave., 6-ft. on each side, between Avenues C and E; B. M. Hart, City Engr.

Ola., Oklahoma City—Elmer Hardy, reported, has contract for culverts on 4 mi. highway, east and west from point 3 mi. south of Edmond; Ed. L. Sheldon, County Commr.

S. C., Gaffney—State Highway Dept., C. F. Jones, Chmn., Columbia, let contract for 3 roads in Cherokee County: 6.19 mi. 18-ft. plain concrete from Blacksburg to North Carolina line, at point near Grover, Ballenger Paving Co., Emaxee Bldg., Greenville,

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

\$177,057; 10.28 mi. 18-ft. plain concrete, from Gaffney toward Jonesville, and from Gaffney to Chesnee, on State Highway No. 11, Crowell Construction Co., Charlotte, N. C., \$232,065.

12-1

Tenn., Athens—McMinn County Commrs., A. Stout, Chmn., let contract to J. F. Milligan Co., Wilkesboro, N. C., at \$45,000, for 3 mi. Lee Highway from Athens to Niota road, near Mitchel's farm.

Tex., Bay City—Matagorda County, Arthur Harris, Judge, reported, let contract to R. W. Briggs & Co., Pharr, for 2 roads: Grading and bridges Highway No. 1-C, \$28,077; 2.77 mi. Highway No. 3-A, 26-ft., at \$46,442; E. N. Gustafson, County Engr.

Tex., Palestine—Foty & Gaylord Co. has contract for cement sidewalks around courthouse square.

Tex., San Antonio—City Comm. let contract to Southwest Bitulithic Co., 711 Gunter Bldg., for 8 blocks street paving, including Donehue, East Quincy St., Newell Ave.; Paul E. Steffler, Commr. of Streets; C. M. Chambers, Mayor.

## Sewer Construction

**Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.**

Ark., Hot Springs—See Water Works.

D. C., Washington—District Commrs., reported, received low bid from M. Cain Co., Inc., 13 Sixth St., N. E., for Third St. N. E. replacement sewer, Michigan Ave. Storm Water Sewer Section 4 Kalmia and Jonquil Service sewer First and T St.; Twenty-fourth St. service Sheridan Rd. service and Brightwood combination system sewer.

1-5

D. C., Washington—District Commrs., reported, let following sewer contracts, cost \$50,000; Northeast Section—Twenty-fourth St. between Cool Spring and Benning Rds., A. McCandlish & Co., Forte St. N. E., storm water sewer in Michigan Ave. between Upshur and Varnum Sts.; Joseph A. Forbes Co., 5401 Seventh St. N. W.; Southeast Section—Sheridan Ro. between Stanton Rd. and Fifteenth Place, H. S. Hatton Construction Corp., First and N Sts. N. E.; Southwest—vicinity of First and T Sts., G. B. Mullin Co., 1296 Upshur Ave. N. W.; Northwest Section—Brightwood combined system in Colorado Ave., between Longfellow and Montague Sts. and in Madison St. between Colorado Ave. and Thirteenth St., Joseph A. Forbes Co.; Kalmia and Jonquil Sts. service sewers, G. B. Mullin Co.

Fla., West Palm Beach—See Roads, Streets, Paving.

La., Baton Rouge—See Roads, Streets, Paving.

La., DeQuincy—Meador Construction Co., 10 W. Harris St., reported, has contract for materials and installation of sewerage system; J. B. McCrary Engineering Corp., Consult. Engrs., both Atlanta, Ga.

12-15

Miss., Forest—See Roads, Streets, Paving.

Miss., Gulfport—See Roads, Streets, Paving.

Mo., Poplar Bluff—City, reported, organize sewer district and issue bonds for constructing box storm sewer; E. C. Nickey, City Engr.

Mo., St. Louis—Board of Public Service receives bids Jan. 24 for public relief sewers. See Want Section—Bids Asked.

Okla., Mountain View—City voted \$45,000 sewer and water bonds. Address The Mayor.

Okla., Oklahoma City—City, reported, receives bids Feb. 15 for sanitary and storm sewers. Address City Clck.

Okla., Shawnee—City Comm. advises nothing definite yet regarding sewer improvements, water extension, etc.

1-12

S. C., Belton—City votes Feb. 7 on bonds for sewerage system; cost \$50,000.

S. C., Greenville—Following sub-contracts let for Southern Pyle Fabric Co.'s plant; 1 story with area underneath 162 ft. long, 90 ft. wide; steel beams carrying first floor and wood timbers carrying roof and monitor; cast iron columns, steel sash and doors; steel sash and monitor; tar and gravel roofing, sprinkler system; Gallivan Construction Co., Gallivan Bldg., Gen. Contrs.; sub-contractors: Tar and gravel roofing, Ramsaur-Lee Roofing Co., 353 W. McBee Ave., Greenville; cast iron columns, American Cast Iron Pipe Co., Birmingham, Ala.; steel sash, Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit, Mich.; steel, Greenville Steel & Foundry Co., 120 Markley St., Greenville; sprinklers, Grinnell Co., 20 E. Fourth St., Charlotte, N. C.

11-10

Tex., Beverly Heights, P. O. Texarkana—Town, reported, voted \$50,000 sewer bonds; E. Newt Spivey, Mayor.

Tex., Fort Worth—City voted bonds for sanitary and storm sewers, water works and park improvements. See Financial News—Bond Issues Proposed.

Tex., Houston—City receives bids Feb. 1 for meters. See Want Section—Bids Asked.

Tex., Lott—City, R. E. Cross, Mayor, reported, install sewerage system.

Tex., Marshall—See Electric Light and Power.

Tex., Yoakum—City, reported, plans expending \$500,000 for public improvements, during 1928, including sewers. Address The Mayor.

Va., Richmond—City, reported, let contract in Jan. for \$100,000 sewers in Oak Grove; \$17,000 for streets in Sherwood Park; \$16,000 for gas and water connections in Sherwood Park. R. Keith Compton, Director Public Works.

W. Va., Huntington—W. F. Kahler, 101 Richmond St., reported, low bidder for sanitary sewer.

## Street Railways

N. C., Salisbury—L. S. Bradshaw, Contr. for rebuilding of burned car barn of Southern Public Utilities Co. advises; walls of present building being used, steel frame, Robertson roofing, steel sash and doors, interior wood walls being replaced with brick walls, fireproof structure, all materials purchased.

1-12

## Telephone Systems

Ala., Birmingham—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., reported, begun \$1,567,000 telephone improvement and extension program for 1928; construct exchange building to serve Tarrant City, Boyles and Inglenook, relieving Woodlawn office; opening for service of new dial central office No. 7 at 1715 Sixth Ave., etc.; T. Barton Baird, Dist. Mgr.

1-5

Ala., Gadsden—Southern Bell Telephone Co., main office Atlanta, Ga., reported, plans expending \$126,300 for additions and improvements to system, new central office equipment, toll lines, etc.

La., La Place—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., reported, erect 1-story and basement telephone exchange building; brick, approximate cost \$25,000; Mayre, Alger & Vinour, Archts., Walton Bldg., Atlanta.

Tenn., Martin—Continental Telephone Co., St. Paul, Minn., reported, acquired local Weakley County Telephone Co.; will remodel.

Tex., Floydada—Southwestern Bell Telephone Co., J. B. Patterson, Dist. Mgr., reported, expend approximately \$11,000 for line extensions.

Tex., San Angelo—San Angelo Telephone Co., capital \$600,000, incorporated; John Y. Rust, E. J. Hardgrave, M. L. Beam.

Tex., San Antonio—Southwestern Bell Telephone Co., main office St. Louis, Mo., reported, plans erecting telephone building addition, Woodlawn Exchange, Mistletoe and Breeden St.; Alex. Dye, Engr.

## Textile Mills

Ala., Anniston—Utica Knitting Co., Utica, N. Y., reported, started construction of second unit of plant on 21st and Walnut Ave.; building will be used for storage and manufacture of paper boxes until machinery is installed; later plans installation of machinery to double output of knitwear; cost \$50,000; C. F. Duke, Contr.

12-1

Ala., Haleyville—Alabama Cotton Mills Co. reported, has plans by Robert & Co., Engrs., Bona Allen Bldg., Atlanta, Ga., for textile mill unit, cost \$200,000; 5000 spindles, mill type construction; also erect model mill village; date of opening bids not set.

1-12

Ala., Prattville—Autauga Cotton Mills let contract to Whiting Machine Works, Whitingville, Mass., for equipment, including pickers, cards, spindles, slubbers, etc.; work by company's forces.

Ark., Warren—City, reported, interested in location of textile mill, by outside capitalists. Address The Mayor.

Ga., Rex—Walter Estes of Estes Mfg. Co., reported, interested in organizing company to erect textile mill.

Ky., Paducah—Claussner Hosiery Co., and New Industries Committee of Board of Trade, reported, interested in establishment of hosiery mill; city to erect building, 55x200 ft., 2 stories, cost \$50,000; will soon apply for charter.

Mo., St. Louis—Walter S. Freeman Mfg. Co., 1531 Washington St., capital \$15,000,

incorporated; Walter S. Freeman, 1101 N. Big Bend Rd.; C. E. French, 4397 McPherson St.; S. S. French.

N. C., Bennett—Bennett Hosiery Mill, W. C. Brewer, reported, has building; install knitting machines; manufacture men's half hose.

N. C., Burlington—May Hosiery Mills, Inc., let contract to Burns Hammond Construction Co., Jefferson Bldg., Greensboro, for finishing building; 3 stories and basement; 211 x11 ft. long; 75,000 sq. ft. floor space; production in finishing departments will be more than double; J. E. Sirrine & Co., Greenville, S. C., Engrs.

N. C., Burlington—Merger, reported, of Stratford Mills and National Hosiery Mills, J. B. Stratford, Pres.

N. C., Greensboro—J. A. Gardner, 211½ N. Tryon St., Charlotte, has contract for 2-story weaving building for Proximity Mfg. Co.; J. E. Sirrine & Co., Engrs., Greenville, S. C.

N. C., High Point—Slane Hosiery Mills, Inc., Mangum, chartered; W. H. Slane, Meredith C. Slane.

N. C., Wadesboro—West Knitting Corp., Syracuse, N. Y., has selected R. C. Biberstein, Archt., 1614 Elizabeth Ave., Charlotte, to prepare plans for mill.

S. C., Lancaster—Lancaster Cotton Mills, LeRoy Springs, Owner, reported, has plans by J. E. Sirrine & Co., Archts.-Engrs., Greenville, for cotton mill; brick walls, concrete footings, built-up roof, wood and cement floors.

S. C., Taylors—Piedmont Print Works, receives bids Jan. 30 for print and dye works; bleaching and dyeing building, 500x211 ft., part 1, 2 and 3 story construction; grey goods storage and machine shop, 150x100 ft., 1 and 2 story; finished goods storage and office building, 200x50 ft., 1 and 2 story; and boiler house; contract for village houses to be awarded later; J. E. Sirrine & Co., Engrs., Greenville.

S. C., Travelers Rest—Poe Construction Co., Capers Bldg., Greenville, reported, has contract for installing water connection in village of Woodward-Baldwin Interests, Renfrew plant; building now under construction; Gallivan Building Co., Gallivan Bldg., Greenville, contractor for plant.

Tenn., Old Hickory—Du Pont Rayon Co., reported, applied for permission to increase capital \$135,000,000 to \$150,000,000.

Tex., Dallas—True Silk Hosiery Co., incorporated; B. L. Gunnell, 1459 Stella St.; R. Cohn, 5931 Velasco St.

Tex., San Marcos—J. C. McKeehan and associates, reported, expend \$30,000 for completion of San Marcos Cotton Mill.

Tex., Vernon—J. W. McDonald, Mgr., Consumers Mfg. Co., New Braunfels, and Thomas J. Hughes, reported, interested in organizing company to erect \$200,000 cotton mill.

Va., Narrows—Cavalier Hosiery Mills, Inc., T. J. Wallner, Pres., reported, plans doubling capacity of plant.

## Water Works

**Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.**

Ala., Bridgeport—Alabama Water Service Co., Birmingham, reported, applied to Public Service Comm., Montgomery, for permission to acquire and operate water plant operated by Bridgeport Water Works Co.

Ala., Mobile—Alabama Water Service Co., Birmingham, reported, applied to Public Service Comm., Montgomery, for permission to lease water plant and system of Chickasaw Utilities Co.

Ark., Hot Springs—So. Hot Springs and Oaklawn Sewer and Water Impv. Dist. No. 1, H. S. Moreland, Dist. Engr., 625 Central Ave., reported, receives bids Jan. 27 for 12 miles sanitary sewers and 8 miles water mains; cost \$115,000.

Fla., Bradenton—City, reported, received low bid for construction of water works plant from J. A. Smith; Fairbanks-Morse Co., 900 S. Wabash Ave., Chicago, has contract for 180 h.p. Diesel engine; Cameron & Barkley, 107 S. Franklin St., Tampa, for crane; Ricketts Haworth, Eva and Raymond St., Tampa, for oil storage tank; Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., for switch and gauge; Nebell-Cleary Co., Atlanta, Ga., for high and low head pumps; E. W. Parker, 305 Cass St., Tampa, for drainage work; H. B. Traugur, 311 W. Hancock St., Lakeland, for pipe connections; J. A. Smith, for building covered reservoir;

rejected bids for electrical work and erection of machinery; will re-advertise for bids for electrical work; E. V. Camp of E. V. Camp and Associates, Inc., Atlanta, Ga. Consult Engr.

Fla., St. Petersburg—City votes Feb. 14 on \$790,000 bonds for construction of soft water system, extension of water mains and purchase of land for water reserve; filtration and softening plants to be located on 25 acre site at 26th Ave., North on 28th St.; R. E. Ludwig, Director of Public Utilities. 1-5

Ky., Cloverport—Chamber of Commerce, reported, interested in construction of water works and fire protection system; Paul Lewis, Pres., securing estimates and survey; definite plans to be discussed Feb. 2.

La., Jonesboro—Town, W. A. Hart, Mayor, receives bids Jan. 31 for water works. See Want Section—Bids Asked.

Miss., DeKalb—Town Clk. receives bids Feb. 10 for pumping plant. See Want Section—Bids Asked.

Mo., Cabool—City receives bids Jan. 16 for water works system. See Want Section—Bids Asked.

N. C., Durham—City receives bids Jan. 26 for water mains. See Want Section—Bids Asked.

N. C., Greensboro—Burns-Hammond Construction Co., Jefferson Bldg., reported, has contract for addition to boiler room at pumping station; deferred award for furnishing 1000 h.p. feed water heater, erecting smokestack, furnishing two 250 h.p. boiler. 12-29

N. C., Hendersonville—City Coms., reported, begin construction work Feb. 15 on water shed on Mount Pisgah; build \$100,000 dam; Gilbert C. White Co., Engrs., 40 College St., Asheville.

Okla., Altus—City, reported, considering bond issue for water works, sewers and parks. See Financial News—Bond Issues Proposed.

Okla., Mountain View—See Sewer Construction.

Okla., Oklahoma City—City, reported, has plans for water works, conduit and filtration plant. Address City Clk.

Okla., Weleetka—City votes soon on bonds for extension to light, water and sewer system; also enlarge ice plant and rebuild storage room. Address The Mayor.

S. C., Charleston—MacDougal Construction Co., 545 Angier Rd. N. E., and Chas. C. Case, 249 Peachtree St., both Atlanta, Ga., reported, have contract for 4½-mile tunnel connecting Edisto and Ashley Rivers; 7 ft. horse-shoe type; brick, concrete and steel; cost \$500,000. 10-27

Tex., Austin—J. F. Johnson, Third and Red River St., reported, low bidder at \$10,098 for water intake screen in intake pipe to water works plant.

Tex., Boerne—Dingman Drilling Co., San Antonio, reported, low bidder for water well.

Tex., Carrizo Springs—City, B. L. Jeffrey, reported, soon receive bids for water works improvements.

Tex., Fort Worth—See Sewer Construction.

Tex., LaGrange—Dalton & Campbell, Dallas, reported, has contract at \$25,606 for installing water mains. 12-15

Tex., Midland—City votes Feb. 6 on water works extension bonds. See Financial News—Bond Issues Proposed.

Tex., San Angelo—West Texas Utilities Co., Abilene, reported, expend \$300,000 for erection of 300,000 gal. water tower, water mains, new equipment, etc.; Davis Construction Co., Dallas, has contract for laying mains.

Tex., San Antonio—Loma Vista Water Co., Incorporated; George X. Saur, Carter F. Sommers, 692 Howard St.

Tex., San Antonio—Walsh & Weidner Boiler Co., Esperson Bldg., San Antonio, has contract for two 300 h.p. boilers.

Tex., Valley Mills—Texas-Louisiana Power Co., Fort Worth Club Bldg., Fort Worth, reported, acquired water plant and electric light plant.

Va., Richmond—See Sewer Construction.

Va., Wise—Wise Water Works, Inc., chartered; R. O. Leete, N. H. Hayes.

W. Va., Bayard—City, reported, having survey made for water system. Address The Mayor.

#### Woodworking Plants

Mo., Hannibal—Hannibal Furniture Manufacturing Co., capital \$125,000, incorporated; D. Hendenkamp, Kirkwood, Mo.; J. F. Henry Hoffman, Hannibal.

N. C., Carthage—Furniture—Tyson and Jones, John R. McQueen, Pres.-Gen. Mgr., increased capital by \$60,000; convert plant

and install equipment for manufacture of furniture.

Tenn., Harriman—Oak Flooring and Mill Work—Stowers Lumber and Manufacturing Co. will probably rebuild burned plant, fire-proof mill building, warehouse and dry kilns. See Want Section—Machinery and Supplies. 1-12

Va., Norfolk—Wood Mfg. Co., acquired site at Planters Ave. and Cromwell Rd. for erection of furniture plant; plans being prepared, soon call for bids; cost \$75,000.

Va., Portsmouth—H. Lasting and associates, Hotel Monroe Bldg., reported, interested in organizing company, erecting furniture manufacturing plant.

#### FIRE DAMAGE

Ark., Helena—Storage sheds and office of Askero Jones Lumber Co., West Helena; loss \$10,000.

Ark., Jonesboro—W. F. Fletcher Furniture Co., 241 S. Main St.; loss \$12,000.

Ark., Ravenden—Ball Mercantile Co., Grover Ferry Store; loss \$20,000.

Ga., Buford—Chrome tannery plant of Bon Allen, Inc.; loss \$175,000 to \$250,000.

Ga., Macon—T. D. Tinsley's residence, 555 College St.

Ga., Valdosta—Converse Building, ground floor occupied by Union Department Store, Inc., second by Dr. L. C. Holtzendorff, third by American Legion; loss \$50,000.

Ky., Carrollton—E. K. Greenwood's residence, Look Rd. near Carrollton.

Ky., Harrodsburg—State Bank & Trust Co. building and J. A. & G. M. Ballard clothing store, Main St., both owned by bank; loss \$60,000.

Ky., Hellier—Noah Justice's boarding house and store; W. P. Childress' store and garage; Mrs. John Bowling's residence; loss \$15,000.

La., Bienville—Depot of Louisiana & Northwest R. R., E. R. Bernstein, Vice-Pres. and Gen. Mgr., Shreveport.

La., New Orleans—Magic Theater, at 2333 Josephine St.; loss \$10,000; address the Mgr.

Md., Baltimore—Apartment house at 2110 Edgewood Ave., owned by H. E. Bayliss, 225 W. Monument St.

Md., Baltimore—Storehouse and lumber of George Sack & Sons, Inc., 4621 Harford Rd.; loss \$75,000.

Miss., Belzoni—Ideal Cash Store building owned by J. B. Garrison.

Miss., Corinth—Mt. Moriah Colored Methodist Church and parsonage. Address The Pastor.

Miss., Meridian—Mrs. A. R. Johnson's rooming house; loss \$20,000.

Miss., Rich—Mrs. J. B. Wildberger's residence; loss \$12,000.

Miss., Ruleville—Residences of Atty. H. Lee Herrings and Jim Wilson; loss \$12,000.

Mo., Bernie—Dr. V. H. Lincoln's residence; loss \$10,000, including furnishings.

Mo., Bernie—High School building; loss \$30,000; address School Board.

Mo., Brownington—School building; loss \$10,000; W. A. Crowder, Pres. School Board.

Mo., Kirkwood, St. Louis—Edward C. Davis' residence; loss \$23,000.

Mo., Maryville—C. B. Bellows' residence; loss \$10,000.

Mo., Pleasant Hope—High School building; loss \$16,000; address School Board.

Mo., Rombauer—School building; address School Board.

Mo., Sikeston—Robinson Lumber Co.'s plant; loss \$100,000.

N. C., Forest City—Forest City Hatchery, owned by Paul Duncan.

N. C., Marshville—United Cash Stores building; loss \$75,000.

N. C., Oxford—Frank Levister's residence.

N. C., Roxboro—Masonic Lodge and building occupied by hardware and grocery store; loss \$75,000.

Okla., Bethany—Girls' dormitory at Bethany Peniel College; Rev. A. L. Parrott, Business Mgr.; loss \$15,000.

Okla., Chickasha—Crescent Wholesale Grocery Co.; loss \$15,000.

Okla., Longdale—Bateman Cash Store and Miller Caf.; loss \$25,000.

Okla., Lovell—Faldeman Drug Store, Just-Rite Cafe, Rhoades Furniture Store, Lovell Barber Shop, Tom Jones Barber Shop, Joe Vadder Grocery Store, Oil Flyer Cafe; loss \$75,000.

Okla., Tulsa—Tulsa Furniture Mfg. Co.'s plant, 623 S. Xanthus Ave.; loss \$30,000.

S. C., Conway—R. Q. Booth's building, Race Path St.; Cherry Hill Baptist Church, Colored.

S. C., Cross—Consolidated High School building; loss \$15,000; address Berkeley County School Board, Moncks Corner.

S. C., Green Sea—School building; address Horry County School Board, Conway; loss \$100,000.

Tenn., Lexington—Hotel Lexington owned by Paul Parker; loss \$12,000.

Tenn., McMinnville—Southern School of Photography owned by S. T. Lively; Fly Overall Co. plant; loss \$100,000.

Tenn., Nashville—Portion of Simplex Manufacturing Co.'s furniture plant, 209 N. Second St.

Tex., Batesville—Mexican School building; address School Board.

Tex., Buda—High School building; Dr. W. E. Holtzclaw, Pres. School Board; loss \$30,000.

Tex., Galveston—Seafood restaurant of John N. Lozica, on Galveston-Houston Highway; loss \$25,000.

Tex., Marshall—G. W. Trammell's residence, W. Houston Ave.; loss \$20,000.

Tex., McKinney—Two warehouses of Southland Ice Co.

Tex., San Angelo—Tank of Reagan County Purchasing Co.; loss \$15,000.

Tex., Wellington—High School building, loss \$100,000; address School Board.

Tex., Waco—Storeroom of D. June Machinery Co., S. First St.; loss \$80,000.

Va., Cambria—Baptist Church. Address The Pastor.

Va., Danville—Hub Clothing Store; loss \$20,000.

Va., Dillwyn—Post office, address the Postmaster; 10 other buildings.

Va., Huske—Two peanut warehouses of Mayes & Crowder.

Va., Martinsville—W. R. Robinson's residence, W. Gravely St.

Va., Purcellville—Paul P. Popkins' lumber plant, J. T. Hirst's building, grocery of Shirley Ball and H. T. McDaniel's store; loss \$50,000.

W. Va., Ashland—Ashland Wholesale Drug Co. building, Leon Shackelford, Pres.; loss \$150,000.

W. Va., Capon Bridge—A. C. Lovett's saw mill and equipment.

W. Va., Springhill—Southmoor Country Club building owned by Springfield Development Co.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### Association and Fraternal

Okla., Oklahoma City—American-First Trust Co., 201 W. Main St., is offering \$335,000 (part of total issue of \$700,000) 6 percent first and refunding mortgage bonds to pay obligations incurred in completing and equipping building, Sixth and Robinson Sts., and to pay as mature \$395,000 unmatured bonds of original \$500,000 first mortgage issue.

S. C., Greenville—Salvation Army, Major

W. A. McIntyre, Commdr., Southern Div., Atlanta, Ga., erect \$35,000 nurses' home, \$42,000 wing to Salvation Army Hospital and 48x60 ft., 3 stories, and building for heating plant with large smoke stack; \$42,000 wing to Salvation Army Hospital and \$250,000 new Bruner Home (orphanage); work probably start within year; latter to include administration building, boys' and girls' dormitories, etc. 7-21

Tex., Dallas—Masonic Temple Corp., Sam P. Cochran, Pres. and Chmn. Bldg. Comm., has

worked out plan to finance \$650,000 temple, E. Harwood St.; steel frame, stone, 6 stories, 113x170 ft., cement, tile and terrazzo floors, concrete foundation, built-up roof; Flint & Broad, Archts., Melba Bldg.; R. O. Jameson, Engr., S. W. Life Bldg. 3-31

**Tex.**, San Angelo—Camp No. 66, Woodmen of the World, erect 100-ft. addition at rear of building.

**Va.**, Hopewell—Hopewell Amusement Corp., M. T. Brodyhill, Pres., probably start work latter part of Jan. on rein. concrete, brick, steel, frame and terra cotta building for Knights of Pythias; 3 stories, 140x110x74 ft., concrete and wood floors, concrete foundation, built-up roof; motion picture theater, seating 800 to 1,000, on first floor; Osbert L. Edwards and Fred A. Bishop, Asso. Archts., Box 188. 12-8

### Bank and Office

**D. C.**, Washington—Robt. F. Beresford, Archt., 1115 Connecticut Ave., N. W., drawing plans for office building, 14th and K Sts.; set back above 110 feet.

**Fla.**, Pensacola—American National Bank erect steel frame addition to 10-story bank and office building; 2 stories, 40x60 ft., linoleum flooring, concrete pile foundation; Warren, Knight & Davis and Chandler C. Yonge, Asso. Archts., 500 Amer. Nat'l Bank Bldg., Pensacola, and Empire Bldg., Birmingham, Ala.; drawing plans. See Want Section—Building Material and Equipment. 1-12

**Ky.**, Louisville—Louisville National Bank & Trust Co. selected St. Louis Bank Building & Equipment Co., Ninth and Sidney Sts., St. Louis, as architects for \$500,000 bank building; 75x120 ft. 9-29

**Md.**, Baltimore—Baltimore Trust Co., Donald Symington, Pres., Waldo Newcomer, Chmn., Board of Directors, probably start work about July 1 on \$3,000,000 bank and office building, Light and Redwood Sts.; tower type, 28 stories and 3 mezzanines and 17 stories and 3 mezzanines, 430 ft. high, 111x194 ft. with set-back above 20th story, banking room 70x190 ft., 45 ft. high, marble or limestone walls, with marble pillars in banking room, 9 passenger elevators for public, 4 elevators for executives and employees, 1 freight elevator; foundation 30 to 35 ft. below street, safe deposit vaults in basement; exterior of first 4 stories stone, remainder brick with stone trim; about 200,000 sq. ft. office space; Taylor & Fisher, Union Trust Bldg., and Smith & May, Calvert Bldg., Asso. Archts.; Herman F. Doebleman, Struct. Engr., 516 N. Charles St. 12-8

**Mo.**, St. Louis—Lindell Trust Co., Grand Blvd. and St. Louis Ave., receives bids Jan. 31 for rein. concrete bank and office building; cost \$150,000, 3 stories, 75x122 ft., yellow pine floors, rein. concrete foundation, composition roof; furnishings, equipment, etc., \$50,000; Wedemeyer & Nelson, Archts., Wright Bldg. See Want Section—Building Material and Equipment.

**N. C.**, Winston-Salem—People's Nat'l Bank, W. A. Blair, Pres., erect North Liberty Branch Bank Bldg., 14th and Liberty Sts.

**Tenn.**, Erwin—Erwin National Bank plans to erect 1-story and balcony building to replace burned structure; D. R. Beeson, Archt., Johnson City; engineer not selected.

**Tenn.**, Knoxville—Greenwood Cemetery Co., Tom O. Kesterson, Sec., may erect office building.

**Tex.**, Brownwood—Citizens National Bank may erect building.

**Tex.**, Houston—Houston Real Estate Board, A. D. Foreman, Pres., 3601 Polk St., considers purchasing or erecting building.

**Tex.**, Junction—Junction State Bank, W. D. Reilly, Pres., erect \$35,000 bank and office building; fireproof, 2 stories, 43x75 ft., stone and stucco; Adams & Adams, Archts., Builders Exchange Bldg., San Antonio.

**Tex.**, Longview—East Texas Chamber of Commerce, R. M. Kelly, Pres., erect \$20,000 fireproof building.

**Tex.**, San Angelo—First State Bank let contract about Feb. 1 for 2-story brick bank building; cost \$20,000; Arthur Swartz & Co., Archts.

**Tex.**, Stamford—Stamford & Western Gas Co., Inc., C. O. Moore, Pres., erect office building.

**Tex.**, Sweetwater—John Doscher receives bids Jan. 23 for fireproof office building; cost \$60,000, 4 stories, 50x75 ft., rein. concrete foundation, columns and slabs, brick walls, hollow tile, cement floors, plate glass, 20-year composition roof, steam heat; stores on first floor; Page Bros., Archts., Austin National Bank Bldg., Austin; following contractors estimating: General Meyer & Johnson; J. C. Clanton; Morgan & Sons, all Sweetwater; John Galen, San Augustine; Reid & Costly,

Wichita Falls; San Antonio Construction Co., San Antonio; mechanical work, Bullock Electric Co.; R. E. Withers, both Sweetwater; W. W. Electric Co., Lubbock; L. P. Snyder, Dallas; Sun Electric Co., Abilene.

### Churches

**Ala.**, Auburn—Baptist Church, Dr. Spright Dowell, Chmn., Bldg. Comm., plans \$70,000 building; equipment about \$30,000.

**Ala.**, Decatur—Central Baptist Church, Rev. Jas. Allen Smith, Pastor, erect \$75,000 main auditorium and parsonage; former seat 1500; work start about April 1.

**Ark.**, Little Rock—Christ P. E. Church, Capitol Ave. and Scott St., Rev. W. P. Wittel, Rector, erect parish house.

**Ark.**, Pine Bluff—First Presbyterian Church having plans drawn by Edwin L. Phillips, Fidelity Trust Bldg., Memphis, Tennessee, for \$150,000 church and Sunday school; furnishings, equipment, etc., \$40,000. 1-12

**Fla.**, Jacksonville—Church of the Good Shepherd probably have plans ready Feb. 10 for bids on first unit of \$550,000 building, Stockton and Park Sts.: cost \$250,000, Gothic type, rein. concrete, brick and steel, 3 stories and basement, concrete and tile floors, steam heat; Corlissier, Lenski & Foster, Archts., Keith Bldg., Cleveland, O.; Mellen C. Greeley, Asso. Archt., 32 W. Forsyth Street, Jacksonville. 10-20

**Fla.**, Sarasota—First Presbyterian Church, A. B. Smith, Chmn. Finance Comm., plans chapel, Oak St.; architects to submit plans.

**Fla.**, South Jacksonville, Jacksonville—Hendricks Memorial Church erect \$30,000 addition to building, Catherine St. and Hendricks Ave.: remodel present structure; brick, wood floors, composition roof. Address The Pastor.

**Ga.**, Atlanta—Citizens & Southern Co. and J. H. Hilsman & Co., Inc., both of Atlanta, are offering \$150,000 first (closed) mortgage 5½% gold bonds to complete Druid Hills Baptist Church.

**Ga.**, Macon—Cherokee Baptist Church completed plans for \$40,000 building; concrete, brick and steel, composition roof, steam heat, 2 stories; Claude Shelverton, Archt., Grand Bldg. 12-15

**Ky.**, Lexington—First Church of Christ, Scientist, plans building, Main St. and Park Ave. Address The Reader.

**Ky.**, Louisville—Holy Trinity R. C. Church, Rev. A. C. Zoeller, Pastor, have plans for \$200,000 church and rectory, Kentucky St. and Schiller Ave., completed about Feb. 15: Spanish Renaissance type, cut stone and light-colored brick, 80x105 ft., two 100-ft. steeples, marble floor and wainscoting in sanctuary, marble rail, marble vestibule; Fred Erhart, Archt., Norton Bldg. 12-15

**Ky.**, Saint Matthews—Bethel Evangelical Church, Rev. W. A. Scheer, Pastor, plans \$30,000 unit of \$125,000 structure.

**Md.**, Gaithersburg—Reiff's Mennonite Church erect \$22,000 building. Address The Pastor.

**Miss.**, Sanatobia—Baptist Church, Rev. J. C. Wells, Pastor, opens bids about Feb. 1 for brick veneer church; cost \$18,000 to \$20,000; 2 stories and basement, about 70x100 ft., hardwood and pine floors, probably concrete foundation, roofing not decided; architect not selected. See Want Section—Building materials and Equipment. 12-29

**Mo.**, Owensville—Immaculate Conception R. C. Church, Rev. Mr. Martin, Pastor, erect \$50,000 building; brick, 1 story and basement, 45x100 ft.; Wm. P. McMahon, Archt., 719 Buder Bldg., St. Louis.

**Miss.**, Hickory Flat—Baptist Church, J. R. Bright, Chmn., Bldg. Comm., has completed plans by Alsop & Callanan, U. & P. Bank Bldg., Memphis, Tenn., for \$10,000 building; brick veneer, 1 story, wood floors, composition roof, stone trim. 9-29

**Miss.**, Lexington—Methodist Church plans building. Address The Pastor.

**Miss.**, Winona—Methodist Church, Rev. Milville Johnson, Pastor, erect \$20,000 Sunday school after plans by R. H. Hunt Co., Archts., James Bldg., Chattanooga, Tenn.; brick, 2 stories, 50x60 ft. 11-3

**Mo.**, West Plains—First M. E. Church South, Fred E. Pease, member, Bldg. Comm., erect building.

**Mo.**, Palmyra—First Baptist Church may remodel church and erect Sunday school room. Address The Pastor.

**N. C.**, Goldsboro—St. Paul Methodist Church, J. T. Jerome, member, Bldg. Comm., plans \$50,000 to \$60,000 Sunday School and \$8000 to \$10,000 parsonage. 1-12

**N. C.**, Greensboro—West End M. E. Church

erect \$13,000 addition, Spring Garden St. Address The Pastor.

**Okl.**, Elk City—Baptist Church, Rev. H. W. Shirley, Pastor, have plans ready about Jan. 25 for brick and rein. concrete building; pine floors and finish, composition roof, 2 stories, 50x100 ft.; Hawk & Parr, Archts., Cotton Exchange Bldg., Oklahoma City. 12-29

**Okl.**, Oklahoma City—Unitarian Church start work in several weeks on \$60,000 building, 13th St. and Dewey Ave.; 34x70 ft., auditorium seat 400. Address The Pastor. 12-23-26

**Tenn.**, Chattanooga—Christ Church erect fireproof building; rein. concrete and brick; Cram & Ferguson, Archts., 248 Boylston St., Boston, Mass.

**Tenn.**, Elizabethton—First Baptist Church, W. M. Vaught, Chmn., Bldg. Comm., having plans drawn by W. Wallace, Archt., 167 Eighth Ave. N., Nashville, for \$150,000 church and parsonage, F St. and Lynn Ave. 12-29

**Tenn.**, Red Bank, Chattanooga—Red Bank Methodist Church, Rev. Fred Watson, Pastor, rebuild burned structure.

**S. C.**, Conway—Cherry Hill Baptist Church rebuild structure noted burned. Address The Pastor.

**Tex.**, Austin—Central Christian Church receives bids Jan. 26 for concrete frame, brick and stone Sunday school; 2 and 3 stories; separate bids same date for plumbing, wiring and steam heating; R. L. White, Archt., Austin; Ralph H. Cameron, Asso. Archt., City Nat'l Bank Bldg., San Antonio. 11-24

**Tex.**, Galveston—First Baptist Church, Rev. Thos. F. Harvey, Pastor, plans Sunday school.

**Tex.**, Houston—Eastwood Baptist Church, Rev. W. D. Lytle, Pastor, plans Church and Sunday School, Clay Ave.

**Tex.**, Midland—Baptist Church, Rev. Geo. F. Brown, Pastor, considers erecting Sunday School annex; dining room, kitchen.

**Tex.**, Midland—Methodist Church, Rev. Stanley Haver, Pastor, plans Sunday School addition.

**Tex.**, Midland—Presbyterian Church, Rev. Thos. D. Murphy, Pastor, plans enlarging.

**Tex.**, Mission—First Christian Church, Rev. LeGrand Pace, Pastor, erect building after plans by Board of Church Erection of Christian Church, St. Louis, Mo.

**Tex.**, Quitaque—Baptist Church plans building. Address The Pastor.

**Va.**, Richmond—Porter Street Presbyterian Church, Rev. R. F. Brown, Pastor, probably start work in month or so on \$14,000 addition; 22 classrooms, brick. 9-29

**Va.**, Roanoke—First Presbyterian Church, C. G. Lindsey, Chmn., Finance and Bldg. Comm., probably take bids about April for \$175,000 church and Sunday school, Wellington Ave. and McClanahan St.; probably stone with slate roof, dimensions not determined; Louis Philippe Smith, Archt., 112 Kirk Ave., Roanoke; Meyer & Mathieu, Const. Archts., 316 Flatbush Ave., Brooklyn, N. Y. 1-12

### City and County

**Ark.**, Little Rock—Pulaski County Quorum Court selected Thompson, Sanders & Ginochio as architects for jail; probably 4 or 5 stories. 11-10

**Fla.**, Coral Gables, Miami—Coral Gables City Comns. erect addition to and remodel present city hall building for central fire station.

**La.**, Shreveport—Caddo Parish Police Jury rejected landscaping bids for \$1,000,000 courthouse; will call for new bids on different plan; Edw. F. Neild, Archt., City Bank Bldg.; Glassell-Wilson Co., Inc., Contr., Sinclair Bldg. 11-3

**N. C.**, New Bern—City Board of Aldermen, Albert Jowdy, Fire Chief, erect fire station.

**Okl.**, Shawnee—City, Neal Wimmer, Mayor, votes on \$10,000 bonds for market.

**Tenn.**, Milan—City Council, J. M. Creswell, Mayor, erect city hall, Williamson St.

**Tex.**, Fort Worth—City defeated \$1,000,000 city hall bonds, \$650,000 public library bonds and \$1,500,000 municipal auditorium bonds. 12-15

**Tex.**, Laredo—City having plans drawn for \$40,000 fire station; rein. concrete and brick, 2 stories, 47x75 ft., cement and rift pine floors, rein. concrete foundation, pitch and gravel roof; John M. Marriott, First Nat'l Bank Bldg., San Antonio, and Fred Buenz, Laredo, Archts. 1-12

**Tex.**, Vernon—Wilbarger County Board of Comms. have plans ready about 60 days for \$375,000 courthouse; concrete frame faced with Bedford stone, 4 stories, 90x140 ft.,

terrazzo floors, steam heat; cost, including furniture, \$375,000; Voelcker & Dixon, Archts., Kahn Bldg., Wichita Falls; bonds voted.

Va., Roanoke—City, W. P. Hunter, City Mgr., erect \$25,000 fireproof fire station, Richelieu and Wellington Aves.; brick, 2 stories, concrete and wood floors, slate roof, dimensions not determined; probably call for bids in March; Louis Philippe Smithy, Archt., 112 Kirk Ave.

### Dwellings

Ala., Montgomery—W. H. LeGrand, Jr., Fairview Ave., erect 4 brick and tile dwellings, College St.; total cost \$14,000.

Ark., El Dorado—Jesse H. Callaway, 518 N. Jackson St., erect \$25,000 residence, Melior Addition; semi-fireproof, face brick, stone and rein. concrete, 2 stories and basement, 50x75 ft., stone trim, hardwood floors, asbestos shingle roof, tile bath; L. W. Hunter, Archt., Armstrong Bldg.

Ark., Fayetteville—Dr. H. T. Harr started work on \$10,000 residence, East Mountain.

Ark., Marked Tree—C. A. Dawson erect \$12,500 residence and garage; brick veneer and half timber, oak floors, tile bath, composition shingle roof, hot water heat; Estes W. Mann, Archt., 203 Cotton Exchange Bldg., Memphis, Tenn.

D. C., Washington—Wm. A. Hill Co., 730 17th St. N. W., has permit for 2 dwellings, 2343-45 Massachusetts Ave., N. W.; 4 stories, brick; total cost \$70,000.

D. C., Washington—John M. King, 913 New York Ave., N. W., has permit for 7 dwellings, 1931-43 Capitol Ave., N. E.; 2 stories, brick; total cost \$24,500; also \$4500 frame dwelling, 3717 Twentieth St. N. E.

D. C., Washington—W. C. & A. N. Miller, 1119 17th St. N. W., have permit for \$10,000 brick dwelling, 2000 Forty-fifth St. N. W.; 2 stories.

D. C., Washington—R. F. Redell has permit for 2 dwellings, 3411-13 Twentieth St. N. E.; 2 stories, frame; total cost \$14,000.

Fla., Clewiston—Mrs. Juanita E. Frederick, 4535 Sheridan Rd., Chicago, Ill., erect 12 small dwellings.

Fla., Jacksonville—Dr. S. A. Morris, 237 W. Duval St., receives bids Jan. 26 for residence; hollow tile and brick, 2 stories and basement, tile roof, hardwood and tile floors, hot water heat, cost \$27,000; Geo. O. Holmes, Archt., 135 E. Bay St.

Fla., Miami—Dr. J. M. Ingersoll, Osburn Bldg., Cleveland, O., having plans drawn for \$25,000 residence and garage, Silver Bluff; hollow tile and stucco, 2 stories, tile floors and roof; E. L. Robertson and L. R. Patterson, Archts., Calumet Bldg., Miami.

Fla., Miami—Krames-Corlett Co., 207 N. E. Second Ave., erect 5 dwellings, 82nd St. and 82nd St. Terrace, Shore Crest; cost \$5000, 1 story.

Fla., Miami—Delbeck Corp. erect \$11,000 dwelling and garage, 1106 Alhambra Circle; 2 stories; F. Seifert, Archt.

Fla., Miami—Carl Green erect \$15,000 residence, Alhambra Circle; A. DeH. Zink, Archt., Seybold Bldg.

Ga., Macon—T. D. Tinsley rebuild residence, 555 College St., noted burned.

La., Abbeville—St. Julien Boudreaux erect residence, Hawthorne St.

La., Jennings—M. W. Stafford erect bungalow, Nezpique St. and Cary Ave.

La., New Orleans—A. J. Kolwe erect 10 single dwellings, Fourth St., near Tonti St.; 23x35 ft., composition roofs; total cost \$14,000; H. J. Estrade, Contr., 7226 Washington Ave.

Md., Baltimore—Felix Agnus Leser, 16 E. Hamilton St., erect residence, Wilton Wood, Green Spring Valley.

Md., Baltimore—Plaza Construction Co., Munsey Bldg., erect 12 brick dwellings, Brendon Ave. and Belair Rd.; 2 stories; total cost \$25,000.

Md., Baltimore—John Welsh, 11 E. Fayette St., erect 17 brick dwellings, 3300 Hillside Rd.; 2 stories; total cost \$36,000.

Md., Baltimore—Alton T. Nichols, 43 S. Hilton St., erect 12 brick dwellings, 3400 block Wabash Ave.; 2 stories; total cost \$40,000.

Miss., Jackson—Paul Gammill, care N. W. Overstreet, Archt., M. & W. Bldg., erect \$16,000 residence; brick and cast stone, hollow tile, metal lath and sash, oak floors, shingle roof, hot water heat.

Mo., Kirkwood, St. Louis—Dwight T. Stewart, Route No. 13, erect \$10,000 residence, Janet Ave. and Armond Drive, 1½ stories and basement, 34x28 ft., concrete foundation, oak floors, tile bath, composition roof, hot air heat.

Mo., St. Louis—R. E. Bell, care Gale Henderson, Archt.-Constr. Supervisor, 13968 Arcade Bldg., erect frame residence, Berry Rd., Wilgus Estate sub-division; 1 and 2 stories and basement, 57x30 ft., hardwood floors, tile bath, composition shingle roof, steam heat.

Mo., St. Louis—Moresi-Prange & Co., 3119 N. Grand Blvd., erect 3 dwellings; brick, 1½ stories and basement, 29x39 ft., stone foundation, stucco trim, tile baths and roofs, oak floors; Nolte & Nauman, Archts., Fuller Bldg.

N. C., Durham—W. E. and R. D. Horner, 920 Darian St., erect 5 frame dwellings, Union St.; 4 rooms; total cost \$10,000.

S. C., Taylors—Piedmont Print Works erect number operatives houses; J. E. Sirrine & Co., Engrs., Greenville.

Tex., Austin—Mrs. S. W. Fischer erect \$20,000 residence, Pemberton Heights; stone veneer, 2 stories, concrete foundation, hardwood floors, tile bath and hall floors, asbestos shingle or slate roof, hot water heat; Edwin C. Kreisle, Archt., 803 Scarborough Bldg., Austin.

Tex., Beaumont—A. P. Graves, Voth Rd., erect residence and 60x100-ft. cattle sales stable on 3-acre tract near Rosedale.

Tex., Dallas—J. W. Lindsay & Co., 1209 Main St., Agts. for Greenway Parks, announce plans nearing completion for several dwellings.

Tex., Dallas—Irving Bassett erect \$16,700 brick residence, 4304 Arcady Ave., Highland Park.

Tex., Houston—W. I. Shotwell, River Oaks Blvd., erect \$21,500 brick veneer residence, McGregor Drive; 6 rooms.

Tex., Houston—Mrs. Burdine C. Anderson selected Birdsall P. Briscoe, Second Natl. Bank Bldg., as architect for \$75,000 residence, 1500 block South Boulevard, Broadacres; stucco and tile or brick and tile, 2½ stories; work probably start within 60 days.

Tex., Houston—G. G. McCall erect brick veneer residence and garage, 2418 Huldy St.; 2 stores, 10 rooms, 2 baths, cost about \$10,000.

Tex., Houston—H. Seltzer, 1901 Dennis St., erect 2 brick veneer dwellings, 1921-23 Hazard and 2526-28 Kingston Sts.; 10 rooms.

Tex., Houston—Travis Masterson erect hollow tile, brick veneer and stucco residence, North Boulevard and Mandell St.; 2 stories; Birdsall P. Briscoe, Archt., Second Natl. Bank Bldg.

Tex., San Antonio—J. B. Morris, 204 Kayton St., plans frame or stucco residence; probably 5 rooms.

Tex., San Antonio—E. R. Thomas, 1102 Grayson St., plans residence, Mandalay Drive, Olmos Park Estates.

Tex., San Antonio—B. G. Miller Building Co., 425 Avondale St., erect 19 dwellings, Olmos Park Estates; stucco, brick veneer or stone veneer, French type.

Tex., San Benito—Stanley Dodds has low bid at \$18,180 from W. F. Chambers for residence; Harvey P. Smith, Archt., Alaska Bldg., San Benito, and San Antonio.

Va., Alexandria—J. C. Ellis, Inc., 1001 Mt. Vernon Ave., expects to erect some dwellings in early Spring.

### Government and State

Ala., Montgomery—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., receives bids Feb. 9 for extension to mailing vestibule, etc., post office and courthouse; drawings and specifications from Custodian at site or from office Supervising Archt.

Fla., Plant City—Board of City Comms., E. H. Thompson, City Mgr., receives bids Jan. 23 for armory for Battery E, 116th Field Artillery; plans and specifications from City Mgr.

Md., Camp Meade—Constructing Quartermaster receives bids Feb. 8 for 1 barrack building, Camp Meade; Colonial type; plans and specifications from Constr. Quartermaster.

Mo., Jefferson City—Missouri State Highway Comm., T. H. Cutler, Ch. Engr., receives bids Jan. 31 for stone office building, including plumbing, water and gas supply, heating, electric work, mechanical equipment and all miscellaneous items; cost \$350,000; 3 stories and basement, 63x114 ft. with 1 story and basement 63x25 ft., extension steel interior partitions, fireproof, 1 electric elevator; plans, specifications and proposal blanks from Highway Commission office or from Egerton Swartwout, Archt., 18 W. 34th St., New York.

Mo., Springfield—Treasury Dept., Jas. A.

Wetmore, Act. Supervising Archt., Washington, D. C., receives bids Feb. 3 for extension to mailing vestibule, post office and courthouse.

Okla., Oklahoma City—Oklahoma National Guard, Chas. F. Barrett, Adj't. Gen., plans armory.

Okla., Oklahoma City—State Board of Public Affairs, G. C. Wollard, Chmn., tentatively let contract to Smiser Construction Co. for \$75,000 Governor's mansion; stone, 12 rooms; Layton, Hicks & Forsyth, Archts., Braniff Bldg.

### Hospitals, Sanitariums, Etc.

Ala., Birmingham—Jefferson County Board of Revenue, Lacey Edmundson, Chmn., having plans drawn by Harry B. Wheelock, Steiner Bldg., for \$150,000 quarters for nurses and internes, Hillman Hospital.

Ark., El Dorado—Warner Brown Hospital, 460 W. Oak St., remodel hospital; cost about \$10,000.

D. C., Washington—United States Veterans Bureau, Frank T. Hines, Director, plans following building programs: \$350,000 for additions to Hospital No. 48, Atlanta, Ga.; \$670,000 for additions at Hospital No. 60, Oteen, N. C., and \$150,000 for additions to Tuskegee, Ala., hospital; all fireproof.

Ga., Alto—Georgia Grand Lodge, A. F. & A. M., Dr. Joe P. Bowdoin, director of child health at State Board of Health, interested, soon inaugurate \$250,000 campaign for children's unit, State Tuberculosis Sanatorium.

Miss., Gulfport—Following contractors estimating on laundry for U. S. Veterans Hospital No. 74, bids opened Jan. 30 by Constr. Div., U. S. Veterans Bureau, Washington, D. C.: Powers Construction Co.; Thomas A. Walker Co., 712 Second St.; Lovell & Moyer, Real Estate Bldg., all Gulfport; Fort Dodge Boiler Works, Fort Dodge, Iowa; J. C. Miller, Campbellsville, Ky.; Henry Keidel & Co., 405 W. Redwood St., Baltimore, Md.; Decatur Iron & Steel Co., Decatur, Ala.; B. E. Buffaloe & Co., Inc., Peoples Bank Bldg., Mobile, Ala.; A. M. Lundberg, 208 N. Broadway, St. Louis; David Lupton's Sons Co., Allegheny Ave. and Tulip St., Philadelphia, Pa.; A. C. Samford, Shepherd Bldg., Montgomery, Ala.; Batson-Cook Co., Inc., West Point, Ga.; King Lumber Co., Charlottesville, Va.; H. H. Robertson Co., First Nat'l Bank Bldg., Pittsburgh, Pa.; D. D. Thomas & Son, 463 N. Dunlop St., Memphis, Tenn.; Collins Bros. Contracting Co., 313 Caillavet St., Biloxi, Miss.; Crane Co., 1225 I St., N. W., Washington, D. C.; Claussen-Lawrence Construction Co., 1394 Gwinnett St., Augusta, Ga.

Mo., St. Louis—Board of Public Service, E. R. Kinsey, Pres., erect boiler house addition to City Sanitarium; brick, 1 story, 60x53 ft., concrete foundation, composition roof, terra cotta trim, steel sash; Albert Osburg, Archt.; L. R. Bowen, Engr.

Mo., St. Louis—Jewish Hospital, 216 S. Kingshighway, selected Graham, Anderson, Probst & White, 80 E. Jackson Blvd., Chicago, Ill., as architects for \$300,000 nurses' home, gift of Mrs. Moses Shoenberg and son; accommodate about 200.

Mo., St. Louis—Missouri Baptist Sanitarium erect addition; used principally for orthopedic and pediatric cases; L. Baylor Pendleton, Archt., 119 N. Seventh St.; brick, terra cotta and rein-concrete, 5 stories, 45x140 ft., composition floors and roof, concrete foundation. See Want Section—Building Materials and Equipment.

N. C., Marion—Marion General Hospital, C. F. James, Pres., open bids about Feb. 1 for brick and tile hospital; frame floors, partitions and roof, 3 stories and attic, 40x96 ft., wood and composition floors, concrete foundation, composition shingle or tile roof, direct radiation steam heat, lighting, power and signal wiring system, hospital plumbing system and fixtures, 1 electric push button elevator; Beacham & LeGrand, Archts., Medical Building, Asheville. See Want Section—Building Material and Equipment.

S. C., Greenville—Salvation Army, Major W. A. McIntyre, Commd., Southern Div., Atlanta, Ga., erect \$35,000 nurses' home and \$42,000 wing to Salvation Army Hospital; probably start work within year. (See Buildings Proposed—Association and Fraternal.)

Va., Richmond—Dr. John R. Blair, Ch. Surgeon, Hygeia Hospital, and others, erect 11-story and roof garden hospital, site present Hygeia Hospital, 101 W. Grace St.; cost \$300,000; fireproof, inside fireproof stairway, exterior stairway fire escape, solarium and diet kitchen on each floor, accommodate 125 patients, each room outside room with 2 or more windows, hot and cold running water and telephone, soundproof walls, 2 high-

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

speed elevators; operating room, laboratories, X-ray and sterilizing rooms on eleventh floor; preliminary plans approved; plan to open hospital Sept. 1.

W. Va., Hopemont—State Board of Control, Jas. S. Lakin, Pres., Charleston, having plans drawn by R. A. Gillis, Fleming Bldg., Fairmont, for \$150,000 fireproof children's unit, State Tuberculosis Sanatorium; Dr. J. G. Pettit, Supt.; 2 stories, 36x237 ft., concrete foundation, built-up roof; furnishings, equipment, etc., \$25,000; Board of Control to purchase material, etc.; work by day labor. 1-12

W. Va., Logan—Dr. L. W. Lawson and Dr. Henry D. Hatfield, Huntington, remodel and enlarge Logan Hospital.

## Hotels and Apartments

Ala., Mobile—A. C. Sherman, 1565 Monterey Pl., soon receive bids for 9-story and basement, 215x378-ft. apartment building, Government and Georgia Sts.; reinforced concrete, brick walls, stone trim, built-up roof, steam heat; Denham, Van Keuren & Denham, Archts., 407 Comer Bldg., Birmingham.

Ala., Montgomery—Wolf Hotel Co., B. W. Scheuer, Pres., let contract to Algernon Blair, 11 S. Lawrence St., for \$500,000, 10-story, fireproof hotel building on site of Imperial Hotel, destroyed by fire; 150 rooms, with bath; Frank Lockwood, Archt., 119 Adams St.

Ark., Magnolia—D. D. Goode and Longino Brothers soon start work in 40 to 50-room hotel on E. Main St.

D. C., Washington—Ell Kay Building and Investment Co., 1631 Euclid St., N. W., will erect \$250,000, 5-story, brick with limestone trimming apartment building at 2800 Ontario Road, N. W.; 31 units ranging from 3 rooms and bath to 5 rooms and 2 baths, 2 electric elevators; Louis T. Rouleau, Archt., 1420 K St., N. W.

D. C., Washington—Burlington Apartment House Co. has permit to erect 1-story addition, enclosing court, at 1120 Vermont Ave., N. W.; \$10,000.

Ga., Moultrie—Community Hotel Co., care W. J. Vereen, has plans in progress, reported, will be ready for distribution by Feb. 1 on \$135,000, 4-story and basement, 65-room hotel building; structural steel or reinforced concrete frame, stone trim, built-up roof, concrete and terrazzo floors, steam heat, elevator service, plate glass, stores on ground floor; Lockwood & Poundstone, Archts., Forsyth Bldg., Atlanta, associated with T. Firth Lockwood, Murrah Bldg., Columbus, Ga. 11-10

Miss., Gulfport—Rea & Weber, Contrs., low bidders at \$80,000 for construction of 3-story, 60x75-ft., reinforced concrete, hollow tile and stucco trim hotel building, 14th St. and 26th Ave.; Shourds & Bean, Archts. 1-5

Mo., St. Louis—J. T. Cravens, Century Bldg., reported, promoting construction of \$1,200,000, 15-story hotel building at S. E. cor. Eighth and Pine Sts.

Mo., St. Louis—B. Goldberg, 5845 Terry St., has permits for six 2-story tenements, 5863-5-9-78-81-5 Terry St.; \$54,000; composition roofs, hot-air heat.

Mo., St. Louis—Harry Spector will not erect \$350,000 apartment building, Lindell Blvd. near Euclid Ave., as reported; property sold. (See Contracts Awarded. 12-22)

N. C., Elizabeth City—E. F. Aydlett, owner of Southern Hotel, announced program of reconstruction, renovating and general improvement, cost \$50,000; leased by C. J. Blanchard, Reidsville; Fred A. Bishop, Archt., Electric Bldg., Richmond, Va.

Okl., Oklahoma City—Ida and William J. Hoover, 1217 E. 17th St., start work at once on \$25,000, 8-family apartment house at 911-13 W. 12th St.; 2 stories, brick, flat roof.

Tenn., Chattanooga—R. Maxwell James, Archt., have plans ready for contractors about Feb. 1, to be opened about Feb. 15, on 8-story apartment hotel at N. W. cor. Walnut and Sixth Sts., for L. S. Daniel, 707 Georgia Ave.; D. B. Vance, Volunteer Life Bldg., and associates; reinforced concrete construction, brick and terra cotta interior, 63x95 ft.; contain 59 apartments, 4 stores on Sixth St. frontage, top floor for roof garden, dining room, etc.

Tenn., Knoxville—Hotel Farragut Co. leased Sterling Hotel property and Blaufeld Building; plans to erect addition, reported to cost \$250,000.

Tenn., Lexington—Mrs. Paul Parker plans to rebuild hotel recently burned; \$16,000; 2 stories, brick, 20 rooms; equipment and furnishings cost \$5000; R. A. Heavener, Archt., Jackson. See Want Section—Building Materials and Equipment.

Tenn., Memphis—Dave Dermon, Dermon Bldg., plans to erect 48-unit apartment building.

Tenn., Memphis—W. C. Stout erect \$10,000, 2-story, brick, concrete and steel apartment building at 1951 Poplar St.; heat \$1000; garage, \$500. 9-8

Tex., Fort Worth—Wyatt C. Hedrick, Archt., First Natl. Bank Bldg., advises regarding proposed \$1,000,000 apartment hotel building for Jesse H. Jones, Goggan Bldg., Houston: "Project has been indefinitely postponed; we do not know just when it will go ahead." 9-8

Tex., Houston—Mrs. Fannie Goldoff erect \$100,000, 2-story, brick veneer 4-apartment house and garage, 104 York St.; 5 rooms and bath each.

Tex., Midland—Dr. C. G. McCall erect 32-room hotel on Main St.; stores on lower floor.

Tex., San Antonio—Mrs. Mayme Leahy plans immediate construction of 2-story addition to Garden Hotel, 116 Navarro St.

Tex., Wharton—Green & Moe, Archts., Houston, preparing plans for \$50,000, 3-story, fireproof, tile and stucco, Spanish design, 44-guest room hotel building.

Va., Fairfax—Dr. Frank T. Stone planning to erect \$100,000 hotel at Lee Highway and Chain Bridge Road.

Va., St. Charles—J. K. Snapp, owner of Princess Theater recently burned, plans to rebuild at once.

## Miscellaneous

Ark., Fayetteville—Rev. Sam Yancey, Supt. of Mount Sequoyah Assembly, will recommend \$20,000 hotel, completion of \$40,000 women's building, new library and study building, 4 new cottages of 4 rooms each.

Fla., Jacksonville—W. H. Adams, Pres. of Florida Fish & Produce Co., 120 S. Ocean St. owners of Atlantic Beach Hotel, announced contracts to be let at once for extension of pier and construction of 2-story bathhouse and swimming pool; \$50,000.

Mo., St. Louis—Henry R. Weisels Co., Inc., 730 Chestnut St., contemplates erecting \$900,000, 6-story fireproof store, office and apartment building, Delmar Blvd., Heman, Syracuse and Enright Aves.

Tenn., Johnson City—Glenn Setzer announced work to start at once on \$20,000 building at N. Roan St. and Fairview Ave., to house Appalachian Funeral Home; include reception rooms, chapel, work rooms, apartment on second floor.

Tex., Austin—O. O. Norwood contemplates erecting 12-story fireproof building on W. Seventh St. between Congress Ave. and Colorado St.; type nor cost yet decided; Giesecke & Harris, Archts., 207 W. Seventh St.

Tex., Corpus Christi—L. L. Eldridge, Archt. and Engr. for Grande Courts Corp., San Antonio, announced plans for fifty 4-room efficiency apartments on North Beach, with initial expenditure of \$50,000.

Tex., Cuero—E. J. Freund, Propr. of Freund Undertaking Establishment, announced work start early in Feb. on \$16,000, Spanish style, 1-story, 54x70-ft. building, cor. Gonzales and Court House Sts.

Tex., Galveston—John D. Lozica, Propr. of John's Oyster Resort, recently burned on Galveston-Houston Road, erect \$30,000, concrete, fireproof building.

Tex., San Antonio—Rev. M. S. Garriga, Vice-Chmn. of Catholic Charities Board, announced plans for \$100,000 girls' orphanage.

Tex., Victoria—Victoria Country Club erect clubhouse and improve golf course; \$10,000.

W. Va., Princeton—Board of Directors of proposed Soldiers' and Sailors' memorial building, A. W. Reynolds, Jr., Treas., will call for sketches of preliminary plans; \$60,000 now available.

## Railway Stations, Sheds, Etc.

S. C., Pomaria—Southern Railway Co. has plans in progress by Engineering Dept., Charlotte, for 1-story, 75x40 ft. depot; reinforced concrete footings, brick walls, wood floors, slate roof.

Tex., Dallas—Texas and Pacific Railroad, E. F. Mitchell, Ch. Engr., planning \$300,000 freight station on Pacific Ave., near Central and Hawkins Sts.

## Schools

Ala., Montgomery—State defeated \$20,000,000 school bonds; address State Dept. of Education. 8-18

Ark., Springdale—School Board selected James Dinwiddie, Fayetteville, as Archt. for

\$80,000 Junior-Senior High School on W. Emma Ave.; auditorium with seating capacity of 600, gymnasium, offices, 2 science laboratories and classrooms, 2 laboratories and classrooms for home economics, 2 laboratories and classrooms for agriculture, 6 junior high school classrooms, 4 senior high classrooms. 12-29

Ark., Stuttgart—School Board planning new \$75,000 High School building.

D. C., Washington—District Commissioners, Room 509 District Bldg., receive bids Jan. 24 for swimming pool, Francis Junior High School; following contractors estimating: H. Herfurth, Jr., Inc., 1406 G Street N. W.; Arthur L. Smith Co., 2525 Pennsylvania Ave. N. W.; H. S. Hatton Construction Co., 100 N Street N. E.; E. Randolph Kent, 1331 I Street N. W.; C. A. Hofferberth Construction Co., 819 15th St. N. W.; Bahen & Wright, 1223 New York Ave. N. W.; George Muller, 1296 Upshur St. N. W.; G. G. Loehler Co., Franklin Natl. Bank Bldg.; V. E. Burner Co., 1319 F Street N. W.; all Washington; Harry E. Totson, Mt. Rainier, Md.; Newport Contracting & Engineering Co., Silsby Bldg., Newport News, Va.; English Construction Co., 15 W. 91st St., New York City; King Lumber Co., Charlottesville, Va.

Fla., Gainesville—State Board of Control, J. Diamond, Sec., Capitol Bldg., Tallahassee, has plans in progress for \$200,000, 4-story and basement boys' dormitory; reinforced concrete frame, brick walls, concrete and wood finish floors; also for \$175,000, 2-story and basement, brick and stucco Library Building at State College for Women, Tallahassee; Rudolph Weaver, Archt. for State Board, 200 Peabody Hall, University of Florida, Gainesville.

Ga., Atlanta—Georgia School of Technology, Dr. W. L. Brittain, Pres., has low bid from George A. Clayton Co., Bonn Allen Bldg., at \$144,483, for 1-story and balcony dining hall extensions; 150x51 ft. with wing 34x99 ft., reinforced concrete, structural steel, tile partitions, Indiana limestone, face brick exterior; plans by Prof. Harold K. Bush-Brown, Archt. 12-8

Ga., Decatur—Druid Hills School District voted \$250,000 bonds for combined grammar and high school building; W. D. Thomson and Walter T. Candler, members Board of Trustees.

Ga., La. Fayette—Lookout Mountain School District voted \$18,000 bonds for new school; address Walker County Board of Education.

Ga., Savannah—Board of Education, Ormond B. Strong, Supt., has plans in progress for 24-classroom and auditorium school building at Battie and 48th Sts.; composition roof, steam heat, brick walls, concrete footings, concrete and wood floors; Cletus Bergen, Constl. Engr.-Archt., Liberty Bank and Trust Bldg.; Levy & Clark, Supv. Archts., Blum Bldg., Battie, 12-22

Ga., Savannah—Board of Education, O. B. Strong, Supt., has tentative sketch of proposed 24-room school at Battie and 48th Sts.; Cletus Bergen, Liberty Bank & Trust Bldg., Constl. Archt.; Levy & Clarke, Supv. Archts., Blum Bldg.

La., Denham Springs—Livingston Parish School Board receives bids Feb. 6 for 2-story, brick and reinforced concrete school and auditorium at French Settlement, and 1-story frame school and auditorium building at Frost; plans and specifications from Jones, Roessle & Olschner, Archts., Roumain Bldg., Baton Rouge.

La., Kaplan—Vermillion Parish School Board, Abbeville, receives bids Feb. 9 on \$75,000, 2-story addition to High School; also separate bids on 1-story frame auditorium on Kaplan school grounds; 20 classrooms, composition and tile roof, cement and stucco front, plastered interior; William R. Burk, Archt., Balter Bldg.

La., Oil City—Caddo Parish School Board, Shreveport, call election Feb. 14 in Oil City School District on \$100,000 bonds, \$75,000 for new High School and \$25,000 for other improvements.

La., Sarepta—Webster Parish School Bd., Minden, receives bids March 6 for \$60,000, 2-story reinforced concrete, brick and stone trim high school; 13 classrooms, library, office and cooking room; equipment and furnishings cost \$10,000; Edward F. Neild, Archt., City Bank Bldg., Shreveport. 1-5

La., Springville—Livingston Parish School Board, Ernest S. Easterly, Supt., receiving bids on 2 new schools; one contains 10 classrooms and auditorium to seat 700, 2 stories, brick, composition roof; other 1-story, frame asbestos shingle roof, contain 6 classrooms and auditorium to seat 400; Jones, Roessle & Olschner, Archts., Maison Blanche Bldg., New Orleans and Raymond Bldg., Baton Rouge.

La., Winnfield—Winn Parish School Board

receives bids Jan. 27 for 2-story, fireproof, \$105,000, brick reinforced concrete and stone trim high school building; built-up composition roof; Herman J. Duncan, Archt., 120 Murray St., Alexandria. 12-29

Miss. Hollondale—Board of School Trustees have plans about Feb. 1 for \$90,000, 1-story, 28x125 ft., brick and concrete school building; reinforced concrete foundation, cast stone; J. M. Spain, Archt., Millaps Bldg., Jackson. 1-5

Miss. New Albany—Union County Board of Supervisors sold \$13,000 bond issue for school building and teachers' home for Keownville Consolidated School Dist. 12-15

Miss. Newhebron—Boards of Supervisors of Jefferson Davis, Simpson and Lawrence Counties call election Feb. 3 in Newhebron Consolidated School District on \$15,000 bonds for school building and teachers' home. Address Jefferson Davis County Board of Education, Prentiss.

Miss. Newhebron—Lawrence County Board of School Trustees has plans in progress for \$60,000, 2-story, reinforced concrete, brick and stone trim school building; composition roof, reinforced concrete foundation, pine floors, structural steel; Emmett J. Hull, Archt., Merchants Bank Bldg., Jackson. 12-29

Miss. Picayune—Board of Education, T. K. Boggs, Supt., receives bids Feb. 3 for reinforced concrete, fireproof, brick, stone trim East Side Grammar School; \$60,000; furnishings and equipment cost \$4000; concrete foundation, wood floors, composition roof, vacuum steam heat; P. K. Boggs, Supt. of Schools; N. W. Overstreet, Archt., Miss. Fire Bldg., Jackson. See Want Section—Building Materials and Equipment. 1-5

Miss. Poplarville—Board of Trustees of Pearl City College selected tentative plans and specifications submitted by D. C. Herron and McCleskey, Archts., Hattiesburg, for \$20,000 girls' dormitory.

Miss. Quitman—Clarke County Board of Education approved consolidation of Stafford Springs Consolidated School District; erect building on Highway near Stafford Springs.

Miss. Stafford Springs—Jasper County Board of Supervisors, Paulding, probably call \$75,000 bond election in consolidated school district for school building and teachers' home.

Miss. University—Students and alumni making drive to secure \$150,000 appropriation for Law Building.

Mo. Webster Groves—Webster College plans to raise fund for erection of \$300,000 addition.

N. C. Lexington—Davidson County Board of Education plans to borrow funds for following school extensions: Two additional rooms and improving present building at Churchland, \$7500; \$7500 toward fund for addition 4 classrooms and 2 basement rooms at Arcadia; \$7500 toward fund for new classrooms and addition to heating plant at Reeds; \$14,000 for auditorium and equipment at Wallburg.

N. C. Raleigh—Peace Institute, Dr. W. C. Pressly, Pres., receives bids Jan. 24 for construction of new dormitory and library.

N. C. Raleigh—Peace Institute, Dr. W. C. Pressly, Pres., receives bids Jan. 24 at office Atwood & Nash, Archts., 803 Odd Fellows Bldg., for first 2 units of \$200,000 building program; 3-story dormitory and 2-story library, both brick.

N. C. Winston-Salem—Forsyth County Board of Education receives bids within 30 days for \$35,000 South Fork consolidated elementary school in Lewisville district; Northup & O'Brien, Archts., Starbuck Bldg.

Okla. Muskogee—Board of Education, Charles Gotwals, Pres., considering bond election in Honor Heights District for \$20,000 school.

Okla. Tulsa—Board of Education announced plans to call \$1,500,000 bond election Jan. 24, finance 2-year building campaign.

S. C. Orangeburg—Board of Trustees of School District No. 26, care W. W. Wannamaker, will call \$300,000 bond election for additional buildings and improvements.

Tenn. Johnson City—Supt. C. E. Rogers and City Commissioners tentatively considering additional school facilities.

Tenn. Rogersville—School Board, Albert Lyons, Chmn., plans to erect \$100,000 to \$125,000, 3-story, brick and concrete school, replace structure burned; concrete foundation, oak floors, tin or asbestos roof, equipment and furnishings cost \$15,000 to \$20,000; advises: "Have not yet called for bids, will do so in short time; will be in market for auditorium seats, stage equipment, desks, chairs, tables, etc."

Tex., Bellaire—Harris County, Judge Norman Atkinson, Judge, Houston, has plans in progress for 2-story, brick and tile, semi-fireproof school for girls; reinforced concrete foundation, tile and tar and gravel roof, edge grain pine, tile and cement flooring; Lamar Q. Cato, Archt., Bankers Mortgage Bldg., Houston. 1-5

Tex., Brownsville—Board of Education receives bids Jan. 24 for auditorium furniture for High School; Phelps & Dewees, Archts., Gunter Bldg.; Atlee B. & Robt. M. Ayres, Asso. Archts., Bedell Bldg., both San Antonio.

Tex., Corpus Christi—School Board call election Feb. 11 on \$500,000 bonds for sites, new buildings, equipment and additions to existing buildings.

Tex., Dallas—Board of Education received offer of 8-acre site in Cedar Crest Addition for erection of High School building.

Tex., Normanna—Normanna Independent School District No. 3, J. E. Brundrett, Sec. School Board, has low bid from F. M. Gill, at \$8930, for 1-story, hollow tile, stucco, brick, concrete, metal lath and plaster school; W. C. Stevenson, Archt., Beeville. 12-29

Tex., Ozona—Board of Education contemplates \$125,000 bond election for school annex.

Tex., Port Arthur—Port Arthur Independent School District Board of Trustees, H. O. Preston, Pres., call for bids in March on new buildings for Tyrrell and Edgemore schools; bids for new junior high school to be let latter part of April; \$850,000 bonds recently sold to provide these units; Mark Lemmon, Archt., 407 Construction Industries Bldg., Dallas. 11-10

Tex., Rotan—Rotan Independent School District voted \$25,000 bonds; include funds for improvements.

Tex., San Angelo—City Commission plans to call \$350,000 bond election for school expansion.

Tex., Seguin—Seguin Independent School District, care J. F. Saegert, has low bid from R. C. Shane, Builders Exchange Bldg., San Antonio, at \$69,948, for 1 and 2 story, 243x103-ft., 13-room and auditorium, brick veneer on hollow tile, reinforced concrete, cast stone trim school building; Marvin Eichenroth & Bartlett Cocke, Archts., Maverick Bldg., San Antonio. 12-15

Tex., Shiner—Shiner Independent School District, T. H. Leslie, Supt. of Schools, has plans in progress by Giesecke & Harris, Houston and Austin, for High School building, \$50,000 bonds voted. 1-5

Va., Radford—School Board, Mrs. F. M. Jones, Clerk, opened bids for \$90,000 High School building; all bids rejected except that of E. S. Glover, Bristol, Tenn., for structural work, and plumbing bid of M. C. Miller, Christiansburg; contracts not yet let; D. R. Beeson, Archt., Johnson City, Tenn. 12-15

Va., Roanoke—Following contractors estimating on 3-story, brick and concrete, fireproof, 108x60-ft. school, Ninth St. and Montrose Ave., bids to be opened Jan. 26: Martin Brothers, 209½ First St. S. W.; D. J. Phipps, Boxley Bldg.; H. A. Lucas, Colonial National Bank Bldg.; J. C. Senter, Maiden Lane, and J. F. Barbour & Sons, 400 Lafayette St., S. Roanoke; Duraflex and terrazzo flooring, built-up roof, concrete and brick foundation; Louis Philippe Smith, 112 Kirk Ave., and Charles M. Robinson, Inc., Rich-Engr., Liberty Trust Bldg.; H. T. Martin,mond, Consol. Archts.; C. S. Churchill, Consol. Chmn. School Board. 1-12

W. Va., East Bank—Board of Education of Cabin Creek District, Kanawha County, call election Jan. 31 on \$220,000 bonds to recondition and make fireproof present High School, build additional rooms.

#### Stores

Ala., Mobile—S. H. Kress & Co., C. C. Smith, Block Island, R. I., Constr. Supt., reported, will expend \$175,000 for extensive enlargement and improvement of store.

Ga., Atlanta—Hanan & Son Shoe Store, Peachtree St., has plans by Pringle & Smith, Norris Bldg., remodel store.

Ga., Rome—S. H. Kress, Inc., 114-16 Fifth Ave., New York, soon receive bids on 3-story and basement, semi-fireproof, 131x60 ft. store building; reinforced concrete footings, structural steel beams, brick walls, terra cotta; E. J. Hoffmann, Archt., care owners.

La., New Orleans—J. W. Ware, Cotton Exchange Bldg., has permit for stores at 601-40 S. Olympia St.; cost \$9500.

Md., Baltimore—McCrory Stores Corp., 1107 Broadway, New York, preparing plans for

remodeling 5-story building at 117-21 N. Howard St.; new front.

Mo., St. Joseph—J. C. Penney Co., Inc., 330 W. 34th St., New York, start extensive remodeling about March 15 on building at 760 Felix St.

N. C., Charleston—S. Brilles, haberdasher, 334 King St., will remodel store building.

N. C., High Point—Building Investment Co. erect \$10,000, 3-story mercantile building on N. Main St.

N. C., Winston-Salem—S. C. Ripple and T. A. M. Stevenson, 315 W. Fourth St., erect 2-story and basement, structural steel frame, fireproof, 108x120-ft. stores building, N. E. cor. Spruce and Fourth Sts.; plans not complete yet; Harold Macklin, Archt., Realty Bldg. 1-12

N. C., Winston-Salem—Gilmers, Inc., O. H. Davis, Pres., N. Liberty St., plans to start work March 1st on \$300,000 to \$400,000, 6-story, basement and sub-basement department store building at S. W. Cor. Fourth and Liberty Sts.; first floor have exterior of stone, while balance will be buff facing brick; 3 or 4 elevators, chutes, automatic heating and cooling system; Northrup & O'Brien, Archts., Starbuck Bldg. 11-4

N. C., Winston-Salem—E. J. Angelo, 520 N. Liberty St., erect brick store and factory building on Burke St., between Brookstown Ave. and Fourth St.

Okla., Tulsa—W. P. Owen, 1203 E. 14th St., plans to erect \$125,000 brick market building at 113-15 S. Boston Ave.

Tenn., Greenville—W. C. Waddell, R. C. Bird and W. R. Lowry plan to erect 2 store buildings on Depot St.

Tenn., Johnson City—Ewald & Co. plant to rebuild department store recently burned.

Tenn., Nashville—Will Warner has permit to repair brick building at 219 Public Square; \$15,000.

Tex., Brady—Broad Mercantile Co. soon have plans by Beverly W. Spillman and Beverly W. Spillman, Jr., Archts. and Engrs., Alamo Bank Bldg., San Antonio, for 1-story, 95x120 ft., brick and concrete store building.

Tex., Brownwood—R. M. Low erect \$15,000 business building.

Tex., Canyon—People's Store, W. A. Warren, Mgr., increase floor space by addition of 90x40-ft. basement, first floor and balcony.

Tex., Dallas—England Electric Shop, Inc., J. M. England, Pres., 1901 Elm St., call for bids in two weeks on \$60,000 building on Live Oak St. near Cantefral St.; Flint & Broad, Archts. Melba Bldg.

Tex., Dallas—A. A. Nolan has permit to repair fire damage 2220 S. Harwood St.; \$14,000.

Tex., Houston—Goggan Building Co. has permit for \$30,000 cast stone building at Main and Capitol Sts.

Tex., Houston—M. J. Sellinger, Blinz Bldg., erect \$30,000, 2-story, brick and wood joisted store and apartment building at 1921-29 Washington St.

Tex., Kerrville—J. L. Pampell has plans by Morris & Noonan, San Antonio, for 1-story, 28x50-ft. concrete frame, hollow tile and stucco store building.

Tex., San Angelo—W. Frank Prince erect \$15,000 business building, Chadbourne St.

Tex., San Antonio—H. Lee Ransom, 127 Oakland St., purchased property at McCullough Ave. and Ashby Place; plans to erect store building in future.

Tex., San Antonio—Louis Lipscomb, Frost Bldg., has low bid from Moeller & Weilbacher, 1211 Willow St., at \$34,389 for 2-story, 68x101-ft., brick, hollow tile, rein. concrete, cast stone trim store and garage building, Convention and St. Mary's Sts.; foundation for 5 stories; Adams & Adams, Archts., Builders Exchange Bldg. 12-29

Tex., San Antonio—Pawnee Realty Co., Dr. F. L. Thomson, Pres., purchased property on East Houston St. for development; character and size of proposed building not yet determined.

Tex., Wichita Falls—Stringer & Robertson erect \$12,500 brick business building in 700 block Eighth St.

Va., St. Charles—George Barker, owner of buildings recently burned, will rebuild.

W. Va., Huntington—Mrs. R. T. Kyle, 2786 First Ave., razed building at cor. Five and One-Half Alley and Ninth St. preparatory to erection of 3-story business block.

W. Va., Huntington—United Cigar Stores Co. remodeling building cor. Ninth St. and Fourth Ave.; \$15,000.

## Theaters

Ga., Donalsonville — Ellison Dunn erect theater building.

N. C., Raleigh — Aronson and Browne, 115 Fayetteville St., and the Walters Estate, joint owners of burned Grand Theater property, plan to rebuild on another site; present site to be used for stores; address O. R. Browne.

Tex., Miles — Earl Zirkle, Coleman, purchased Cupid Theater, will remodel and install new equipment.

Va., Salem — Plank & Whitsett, Blacksburg, probably ask bids about Feb. 15 to March 1 on \$50,000, 1-story and balcony, brick, fireproof, 45x130-ft. theater building; concrete floors, built-up roof; sketches in progress by

Louis Philippe Smithey, Archt., 112 Kirk St., Roanoke.

## Warehouses

Ga., Rome — Central of Georgia Railway, C. E. Weaver, Engr., Savannah, completed plans for erection of warehouse; brick walls, concrete footings, miscellaneous structural steel, steel sash.

Kan., Kansas City — Permanent Water Proofing Co., Dwight Bldg., purchased property at 1619 Wyandotte St. as warehouse site.

Tex., Houston — John T. Boyle Co., Union Natl. Bank Bldg., has plans for \$50,000 4 or 5-story, fireproof warehouse on Beaumont St.

Tex., Port Arthur — Sabine Supply Co., Orange, reported, considering purchase of property at 12th St. and Fort Worth Ave., for \$30,000 to \$35,000 warehouse.

and Nashville, Trust Bldg., Nashville, Tenn.; P. Olivier & Son, Inc., Contr., 114 Bilbo St., Lake Charles.

Md., Mt. Washington, Baltimore — St. John's P. E. Church let contract to Thos. Hicks & Sons, Inc., 106 W. Madison St., for \$100,000 church and parish house, South and Kelly Aves.; 273,000 cu. ft., Norman Gothic type, L shape; Wyatt & Nolting, Archts., Keyser Bldg.

Miss., Hattiesburg — Broad Street M. E. Church, South, started work on \$35,000 church and Sunday school by day labor; brick, 1 story and basement and 3 stories, 68x52 ft. and 42x80 ft., heart rift pine floors, rein. concrete foundation, asbestos roof; R. C. Springer, Archt., Rosenbaum Bldg., Meridian; S. M. Sigrest, Constr. Supervisor, Hattiesburg. Address J. H. Weems, 308 Second Ave. See Want Section—Building Material and Equipment.

N. C., Kinston — St. Mary's P. E. Church, Rev. Harrell J. Lewis, Rector, started work on 2-story parish house; auditorium, gymnasium, stage, classrooms.

Tex., Bryan — Garnett Church Furniture Co., 309 Scarritt Arcade, Kansas City, Mo., has seating contract at \$5000 for First Baptist Church.

Tex., San Antonio — Oblate Fathers, McCollough Ave., erect third story addition to building, 1919 McCollough Ave.; cost \$10,000; Aug. Fuessel, Contr., 1903 Virginia St.

## City and County

Ala., Birmingham — City completed foundation for \$25,000 fire station, First Ave. and 57th St., Woodlawn Park; brick, steel and stone, 2 stories, 50x70 ft., wood and concrete floors, concrete foundation, tile roof; Turner & McPherson, Archts.; Frank M. Orr, Engr., both Martin Bldg.; Johnson-Woolley Construction Co., Contr., 30 W. Third Ave. 1-5

Miss., Crystal Springs — Town, Conway, Town Clk., let contract to P. T. Johnson for jail.

Okla., Muskogee — Following contracts let for \$350,000 Muskogee County courthouse: Electrical work, Valentine Electric Co., 221 W. Okmulgee St.; tile and brick, Standard Brick Co.; lumber, Geo. D. Hope Lumber Co., 111 E. Okmulgee St.; painting, R. M. Burchett, all Muskogee; metal windows, S. H. Pomeroy Co., Inc., 286 E. 134th St., New York; metal doors and rein. steel, J. B. Klein Iron and Foundry Co., 1006 W. Second St., Oklahoma City; lath and plaster, Monahan Plastering Co., Court Arcade Bldg., Tulsa; orn. iron, Southwest Wire and Iron Works Co., 1722 Tracy St., Kansas City, Mo.; marble and tile, Arnosti Marble Co., Carthage, Mo.; Layton, Hicks and Forsyth, Archts., Braniff Bldg., Oklahoma City; H. O. Valeur, Const. Archt.; Manhattan Construction Co., Contrs., both Manhattan Bldg., Muskogee.

Okla., Oklahoma City — Following contracts let for \$26,000 old men's home at county farm: Millwork, Tibbs-Dorsey Mfg. Co., 911 S. Walker St.; painting, T. B. Devore; plumbing and heating, Oller Heating Co.; wiring, Wetherbee Electric Co., 510 N. Hudson St.; brick, Reagan Brick Co.; steel, J. B. Klein Iron and Foundry Co., 1006 W. Second St.; stone, Dolese Bros. Co., 11 W. 13th St.; cut stone, Harter-Marblecrete Co., 1608 W. Main St.; cement lime, Ketcham Lumber Co., 19 W. 7th St.; Guy Reed, Archt.; R. M. Crissman, Contr., 619 S. W. National Bldg.

## Dwellings

Ala., Birmingham — D. J. Duffee, 2502 18th Court, erect brick veneer residence, W. Seventh Ave. near 16th St.; cost about \$10,000; 2 stories, 60x44 ft., composition roof; Herron & Tillia, Contrs., 406 N. 23d St.

Fla., Jacksonville — Buckman & Ulmer, 212 W. Forsyth St., erect \$22,000 dwelling, Hogan and Union Sts.; brick veneer, 1 story; G. W. Hessler, Inc., Contr., Barnett Bldg.

Fla., Leesburg — First Baptist Church let contract to Scarborough & Miller for parsonage, 13th St.

Fla., St. Petersburg — Curtis P. Moore, 106 Ninth Ave., North, completed foundation for \$8500 residence; wood Creo-Dipt shingles, 2 stories, 33x41 ft., hardwood floors, rein. concrete foundation; address proposals on furnishings, equipment, etc., \$2500, to owner; plans by Long-Bell Lumber Co., R. A. Long Bldg., Kansas City, Mo.; Harrington & Safford, Contrs., 4800 Thirty-first Ave., North; heating, American radiator (Vecto), F. E. Robinson, 1805 Central Ave., both St. Petersburg; electrical work and plumbing not let. See Want Section—Machinery and Supplies.

Ga., Atlanta — H. W. De Mille, 179 Avery Drive, erect 2 dwellings, 105-109 Avery; 1

## BUILDING CONTRACTS AWARDED

## Association and Fraternal

Ala., Bessemer — Myrtle Linton Lodge No. 130 let contract for \$25,000 temple, Fourth Ave. near 16th St., to J. E. Dillard, 1 Twentieth St.; brick, built-up roof; stores on first floor.

Fla., St. Augustine — Young Men's Christian Assn., L. O. Larson, Chmn., Bldg. Comm., erect gymnasium, 60x100 ft., seat about 600; dressing rooms, showers, etc.; St. Augustine Building Co., Contr.

Fla., Tallahassee — Suwanee River Council, Boy Scouts of America, let contract to E. E. Bass Construction Co., Quincy, for camp near Tallahassee; swimming pool, assembly hall, dining room, kitchen, electric light plant, athletic field, running water; cost about \$12,000.

Miss., Ocean Springs — McLeod Lodge No. 424, F. & A. M., let contract to Lovell & Moyer, Gulfport, for \$15,000 temple; brick walls, steel and wood frame, 2 stories, 35x76 ft., wood floors, concrete foundation, built-up roof; Shaw & Woleben, Archts.; electrical work, Standard Electric Co.; plumbing and roofing and sheet metal, Hamilton Brothers Co., all Gulfport.

Tex., Waco — Karem Building Temple Corp., G. H. Zimmerman, Pres., let contract at \$150,000 to J. S. Harrison Construction Co., for Karem Shrine temple; brick, stone and rein. concrete, 3 stories; Herbert M. Greene Co., Archt., Constr. Industries Bldg., Dallas.

12-15

## Bank and Office

D. C., Washington — Columbia Medical Building, Inc., Dr. Chas. Stanley White, 1426 16th St., N. W., temporary president pending incorporation, erect \$750,000 building for doctors and dentists, 911 19th St.; site 155x25x142 ft.; 8 stories, 3 elevators; drug and instrument store on first floor; Marcellus E. Wright, Archt.; Lee Paschall, Contr., both American Natl. Bank Bldg., Richmond, Va.

Ga., Donaldsonville — Roy Robinson erecting office building; automatic bottling plant on first floor.

La., New Orleans — Fenner & Beane, brokers, 818 Gravier St., let contract to Wm. Wallace, 131 N. Jefferson Davis Pkwy., to remodel ground floor of building, 814-19 Gravier St.; cost \$35,000; new refrigeration, ventilating and steam heating systems, wiring, plumbing, plastering, flooring, tile and sheet metal work; Wm. E. Spink, Archt., 1001 Pere Marquette Bldg.

Md., Baltimore — Maryland Casualty Co. let contract to Consolidated Engineering Co., 20 E. Franklin St., to alter building, 32 South St., for claim dept.; cost \$10,000; Lucius R. White, Jr., Archt., Hearst Tower Bldg.; millwork, Otto Duker & Co., 530 Albemarle St.; glass, Pittsburgh Plate Glass Co., 8 S. Paca St.; painting, Stephen Evans, 471 E. Biddle St.; plumbing, Lloyd E. Mitchell, 915 E. Monument St.; electrical work, Blumenthal-Kahn Electric Co., 518 N. Charles St.; tile, American Tile and Cement Co., 27 W. North Ave.; hardware, Hubbard & Eagleston, 120 W. Baltimore St.

Mo., St. Louis — National City Bank, Central Natl. Bank Bldg., alter 4-story bank and office building, 716-18 Locust St.; cost \$30,000; Preston J. Bradshaw, Archt.; H. Payne, Contr., both Int. Life Bldg.

N. C., Asheville — Haywood Service Station, Inc., 64 Haywood St., erect \$75,000 store and office building, 60-62 Haywood St.; 3 stories, stores on first floor; S. Sternberg & Co., Struct. Engr., Glen Rock Station, to furnish steel; J. E. Joyner, Contr., Revel Bldg.

Okla., Oklahoma City — Following contracts let for \$1,500,000 to \$1,750,000 administration

and equipment building for Southwestern Bell Telephone Co.; Cement, Dewey and Oklahoma Portland Cement Co., Trades Natl. Bank Bldg.; sandstone, Dolese Bros., 11 W. 13th St.; fire doors, etc., Bissell Builders Supply Co., Colcord Bldg.; glass and glazing, Pittsburgh Plate Glass Co., 116 E. Grand St.; plastering, A. E. Maidt Co., First Natl. Bank Bldg.; marble, tile and terrazzo, Taylor Marble and Tile Co., 515 W. Pine St.; mastic floors and fireproofing, Johns-Manville Corp., 719 W. Hill St.; roofing and sheet metal, Standard Roofing and Material Co., 525 W. Main St., all Oklahoma City; rein. steel, Southern States Steel Corp., 503 S. Haskell St.; millwork, Buell Lumber and Manufacturing Co., 731 N. Hawkins St., both Dallas, Tex.; granite, Cold Spring Granite Co., Cold Spring, Minn.; Bedford stone, Bedford Carthage Stone Corp., Runnels and Bell St., Houston, Tex.; terra cotta, Kansas City Terra Cotta and Faience Co., 19th and Manchester St.; waterproofing, Permanent Water Proofing Co., 407 Dwight Bldg., both Kansas City, Mo.; orn. iron, Herzog Iron Works, St. Paul, Minn.; metal windows, Campbell Metal Window Corp., Pershing Sq.; casement sash, International Casement Co., 101 Park Ave.; mail chute, Cutler Mail Chute Co., 345 Madison Ave.; chimney, Alphonse Custodis Chimney Construction Co., 93 Nassau St., all New York; metal partitions, E. F. Hauserman Co., 6810 Grant Ave., Cleveland, Ohio; floorwork, John F. Rohrer, Tulsa, Okla.; window caulking, St. Louis Window Caulking Co., Chemical Bldg., St. Louis, Mo.; Layton, Hicks & Forsyth, Archts., Braniff Bldg., Oklahoma City; I. R. Timlin, Asso. Archt., Telephone Bldg.; W. J. Knight & Co., Struct. Engrs., Wainwright Bldg., both St. Louis; Louis Leifer, Mech. Engr., 41 W. 11th St., Oklahoma City; H. H. Morrison, Elec. Engr., Fullerton Bldg., St. Louis; foundation put in by Westlake Construction Co., Rwy. Exchange Bldg., St. Louis; Hughes-O'Rourke Construction Co., Contr., 1713½ Live Oak St., Dallas.

Tex., Baytown — Humble Oil and Refining Co., Houston, started work on \$75,000 office building; dark red rough face brick, 2 stories and basement, 44x120 ft., concrete floors, asbestos shingle roof; 15 offices, lavatories, storage vaults; work under supervision of F. T. Fendley, company architect.

Tex., San Antonio — Federal Reserve Bank let contract for \$250,000 building, Villita and Navarro Sts., to J. DePuy, Builders Exchange Bldg.; rein. concrete, brick, cast stone and marble, 2 stories and basement, 60x80 ft., tar and gravel roof; Atlee B. & Robt. M. Ayres, Archts., Bedell Bldg.; W. E. Simpson & Co., Engrs., Natl. Bank of Commerce Bldg.; plumbing and heating, West & Gutzeit, 427 Main Ave., \$9930; wiring, Kirkwood & Wharton, 456 Main Ave.; \$7675.

## Churches

Fla., Cross City — Methodist Episcopal Church erecting \$15,000 building, Cotters addition; concrete block and frame, stucco, 1 story, 40x60 ft., pine floors, concrete and concrete block foundation, composition shingle roof; furnishings, equipment, etc., \$10,000; Wm. H. Bolton, Archt.-Contr., Palatka; work to first floor joist.

La., Bunkie — Baptist Church, L. P. Carter, Chmn. Bldg. Comm., started work on brick building; 40x56-ft. auditorium seat 750, 32 rooms; W. E. Keller, Constr. Supervisor, Mansfield.

La., Lake Charles — Orange Car and Steel Co., Orange, Tex., has contract for about 60 tons struct. steel for \$125,000 Broad Street M. E. Church; Asmus, Clark & McCook, Archts., Frank Bldg., Lake Charles,

story and basement, 6 rooms and bath, composition roof, hot air heat; total cost \$10,000; day labor.

Ga., Atlanta—Mrs. M. M. Emmert, 1185 Peachtree St., let contract at \$47,380 to Gilbert Beers, Bona Allen Bldg., for brick veneer residence, Paces Ferry Rd. and North Side Drive; 2 stories and basement, 97x72 ft., wood, tile, brick and linoleum floors, stone tile foundation, slate roof; O. J. Southwest, Archt., 206 Haas-Howell Bldg.; V. T. Hager, Engr., Walton Bldg. See Want Section—Building Material and Equipment.

Ga., Atlanta—John A. Metcalf, care Manufacturers Outlet Store, N. Forsyth St., erect \$17,500 residence, Ponce de Leon Ave.; brick veneer, 2 stories and basement, hardwood floors, tile roof, steam heat; Fred P. Coleman, Contr., 35 W. Paces Ferry Rd.

La., New Orleans—Scorza & McLean, 2328 Annette St., erect \$14,000 single raised dwelling, Soniat St.; tile roof.

Md., Baltimore—Alton F. Nichols, 43 S. Hilton St., erect 12 brick dwellings, 3401-23 Wabash Ave.; 2 stories, 19x33 ft., slate roof, hot water heat; total cost \$36,000; E. R. Guyon, Archt.; owner builds.

Md., Baltimore—James Keelty, 3529 Edmondson Ave., erect 18 brick dwellings, Edmondson and Wildwood Aves., and Edmondson and Augusta Aves.; 2 stories, 22x32 ft., steam heat; total cost \$44,000; F. E. Beall, Archt., 306 St. Paul St.; owner builds.

Md., Baltimore—John L. Tregallas, Inc., 10 E. Fayette St., erect 9 frame dwellings, 2900-10, 2003-07 Oakland Ave.; 1½ stories, 24x30 ft., shingle roofs, hot air heat; total cost \$22,500; Bernard Evander, Archt., 20 E. Lexington St.; owner builds.

Md., Baltimore—Geo. W. Schoenhals, Munsey Bldg., erect 28 brick dwellings, 3700 and 3800 blocks Tudor Hall Ave.; 2 stories, 6 rooms and bath; total cost \$200,000; owner builds.

Md., Baltimore—Park Lane Co. erect \$40,000 English type dwelling, Park Heights Ave., N. of Seven-Mile Lane; stucco and stone, 11 rooms, 3 baths; Harold Appleton Stilwell, Archt.; Peyton B. Strobel Co., Contr., both 206 E. Lexington St.

Md., Baltimore—G. Briscoe Karn, 4002 Bateman Ave., erect 2 frame dwellings, 3900-4000 Bateman Ave.; 2 stories, 28x28 ft. and 24x34 ft., slate roofs, steam heat; total cost \$12,500; plans and construction by owner.

Mo., St. Louis—Wm. D. Einig, care Manske & Bartling, Archts., 410 N. Euclid Ave., erect brick dwelling, West Moore Park; 1½ stories and basement, 28x34 ft.; Archer Garland, Contr., 1221 Louderman Bldg.

Mo., St. Louis—F. Krey, care Bergfeld Realty Co., Contr., 610 Chestnut St., erect \$50,000 residence, 5745 Lindell Blvd.; 2 stories and basement, 50x60 ft., oak floors, tile baths, slate roof, concrete foundation, hot-water heat, 40x24-ft. garage; Nolte & Naumann, Archts., Fullerton Bldg. 1-12

Mo., St. Louis—Harold E. Wilson, 18 N. Eighth St., erect brick residence, Lindell Blvd. near DeBaliviere; 2½ stories and basement, 70x41 ft., 12 rooms, 3 baths, 3-car garage, hardwood floors, slate roof, hot-water heat, oil burner, electric refrigerator; F. G. Avis, Archt., 1019 Big Bend Rd.; owner builds.

Tenn., Knoxville—O. W. Sweat, Contr., 218 Emoryland Blvd., erect \$11,000 Colonial dwelling, Magnolia Ave.; 2 stories, sand face brick, tile roof.

Tenn., Memphis—Dr. Jas. B. Stanford, Shrine Bldg., let contract to E. Iverson, 1810 Kenilworth Ave., for brick veneer and limestone residence, Walnut Grove; 2 baths; Walter R. Nelson, Archt., Shrine Bldg. 11-3

Tex., Graham—M. K. Graham excavating for \$50,000 residence; Colonial red face brick, gray limestone trim, tile backing, 2 stories, attic and part basement, 12 rooms, 4 baths, 2 sleeping porches, slate roof, elevator, steam heat, incinerator; Bryan & Sharp, Archts., Const. Industries Bldg., Dallas.

Tex., Houston—Geo. Ackles let contract at \$16,000 to R. H. Darby for 2 duplexes, 2109-2113 Berry Ave.; 2 stories, brick veneer, 7 rooms each.

Tex., Houston—O. E. Bass erect \$10,000 bungalow, Barbee St., in addition to 1 nearing completion.

Tex., Houston—Robt. H. Darby erecting 2 duplexes, Berry Ave. near Allen School; cost about \$10,000 each.

Tex., Houston—J. L. Strausbaugh started work on dwelling, Washington Terrace.

Tex., Houston—Detering Concrete Tile Co., 3016 Washington St., has tile contract for R. B. Bowen residence, River Oaks; Chas. W. Oliver, Archt.; River Oaks Corp., Contr., both River Oaks Bldg.

Tex., La Porte—W. H. Irving let contract

to Johnson & Gustavson, Houston, for \$40,000 residence; tile and stucco, 2 stories; Joseph Finger, Archt., Keystone Bldg., Houston.

Tex., San Antonio—Frank Carson, 1017 Howard St., erect rock residence, Burr Rd.; 1 story, 8 rooms, sleeping porch, rock interior finish, granite and marble, hollow tile partitions, hardwood floors, tile roof; L. Harrington Co., Archt.-Engr., Builders Exchange, drawing plans; owner builds.

### Government and State

Tex., Fort Sam Houston, San Antonio—Constructing Quartermaster, Capt. A. W. Parker, let contract to L. T. Wright & Co., Builders Exchange Bldg., San Antonio, for 2 units of barracks building program; 1 regimental and 1 battalion barrack buildings, modified Spanish type, rein. concrete, tile roof; W. E. Simpson & Co., Engrs., National Bank of Commerce. 12-29

Va., Lynchburg—A. W. Mosby, 922 Harrison St., erect building, Campbell Ave. and Sackett St., Fairview Heights, for post office sub-station.

### Hotels and Apartments

Ala., Birmingham—Maloney & Maloney, Jackson Bldg., erect \$100,000, 3-story, brick, stone trim, 42-unit apartment building at S. 20th St. and 13th Ave.; built-up roof, steam heat, concrete and wood floors; Jacob & Sallie, Archts., 2109 N. Fifth Ave.; owner builds.

Fla., Jacksonville—Thomas G. Johnson, 2865 Post St., erect \$15,000, 2-story, brick veneer apartment house, College between Cherry and Ruble Sts.; owner builds.

Miss., Gulfport—George W. Shirley let contract to Fred T. Rea, at \$72,268, for 3-story hotel at N. E. cor. 14th St. and 26th Ave.; reinforced concrete, hollow tile walls, stucco outside finish; heating, plumbing, roofing and sheet metal and oil burners contracts let to Hamilton Brothers, at \$24,649; electrical work to Gates Electric Co., \$4,400; Heady and Hershey, lessees; Shourds & Bean, Archts.

Mo., St. Louis—L. Grossberg, 510 Central Natl. Bank Bldg., erect \$40,000, 3-story, brick, 77x172 ft. tenement at 4111-17 Enright St.; composition roof, steam heat; P. Rollhaus, Archt., 610 Central Natl. Bank Bldg.; owner builds.

Mo., St. Louis—G. Hampel, 6064 Wanda St., erect two 2-story, brick, 19x50 ft. tenements, 5919-21 Gertrude St.; composition roofs, hot-air heat; \$10,000; owner builds.

Mo., St. Louis—H. E. Darr, 2005 S. Grand St., erect 2-story tenements at 5032-36 Thelozan St.; \$12,000; 23x45 ft., fireproof shingle roof, steam heat; owner is Archt.-Builder.

Mo., St. Louis—R. R. Rosemond Co., 6115 Gravois St., erect \$10,000, 2-story, 33x48 ft., brick tenement at 5189-91 Goethe St.; tar and gravel roof, hot air heat; owner builds.

Mo., St. Louis—Queens Investment Co. let contract to C. Wilson Contracting Co., both 4533 N. Kingshighway, for 2 two-story, 34x47-ft. brick tenements, 4138-40 San Francisco St.; \$14,000, asphalt shingle roofs, furnace heat; O. Siever, Archt., 5001 Allcott St.

N. C., Raleigh—Consolidated Engineering Co., 20 E. Franklin St., Baltimore, Md., acting as agents, purchased unfinished building at Hargett and McDowell Sts. and has general contract to erect \$800,000 apartment hotel on site.

Okla., Tulsa—Bond Department, Whitney-Central Banks, New Orleans, La., offering \$325,000 First Mortgage 6% Serial Gold Bonds of Mincks Hotel Co. for completion of construction of 13-story and basement, fireproof hotel building at N. W. cor. Cheyenne Ave. and Fourth St.; building cost \$420,000, furnishings and fixtures \$115,000; contain 171 guest rooms, each with private bath and running ice water; space provided on ground floor for cafeteria and drug store and on second floor for barber shop and beauty parlor; 2 elevators; leased to I. S. Mincks, 25 East Fourth St.; F. D. Redlick, Archt.; Van Horn Construction Co., Contr., 526 S. Kenosha St. 10-6

Tenn., Knoxville—O. W. Sweet, Contr., erecting \$20,000, frame, 16-room, English style apartment house at McCalla and Ben Hur Ave.; 4 units of 4 rooms and bath each.

Tex., Del Rio—F. L. Childs and Mrs. M. E. Faust have final plans about Feb. 1st for \$175,000, 6-story, fireproof hotel building; 84 rooms each with shower or bath; John Marrott, Archt., Frost Bldg.; Walsh & Burney, Inc., Contr., 928 N. Flores St., both San Antonio.

Tex., Houston—J. V. Adoue, 436 Westmoreland St., let contract to Russell Brown Co., 3104 Main St., for \$41,500, 2-story, brick

veneer, 8-apartment house at S. W. cor. Westmoreland and Burlington Sts.

Tex., San Antonio—E. M. Baxter, 236 Peck Ave., let contract to W. D. Russell, 818 Avant St., for \$15,000, 2-story, brick veneer apartment house at 209 Carleton St. 1-12

### Miscellaneous

N. C., Statesville—Mrs. John H. Gray erecting \$33,000 restaurant at Front and Center Sts.; Martin L. Hampton, Archt.; Grier-Lowrance Construction Co., Contr. 1-12

Tex., San Antonio—International Exposition Assn., care Ed Raymond, 306 Alamo Natl. Bank Bldg., let contract to Lamella Trussless Roof Co., 801 Kirby Bldg., Houston, for \$68,000, 1-story, 200x325-ft. Exposition and Fair Building; wood construction with Lamella Trussless roof, concrete foundation, composition roof; private plans. See Want Section—Building Materials and Equipment. 1-12

### Schools

Fla., Pahokee—Palm Beach County Board of Public Instruction let contract to Belle Glade Construction Co., both West Palm Beach, at \$39,560, for 2-story, stucco and tile, 8-room school; Harvey & Clarke, Archts., 307 S. Olive St., West Palm Beach. 12-8

La., Melville—St. Landry Parish School Board let contract to Thurston F. McKinney, both Opelousas, for \$10,000, 1-story, brick High School addition; Herman J. Duncan, Archt., 120 Murray St., Alexandria. 12-15

La., New Orleans—Orleans Parish School Board let contract to Reimann Construction Co. at \$144,000 for 3-story addition to Beauregard School, Canal and S. Murat St.; E. A. Christy, Supv. Archt. of Board, City Hall Annex. 12-15

La., Opelousas—St. Landry Parish School Board, W. B. Prescott, Supt., let contract to E. E. Bababais, Bunkle, at \$46,700, for 2-story, brick school building at Grand Prairie; Herman J. Duncan, Archt., 120 Murray St., Alexandria. 12-22

Oka., Muskogee—School Board, Charles Gotwals, Pres., probably call election for new ward school in Honor Heights District.

Tenn., Cleveland—V. L. Nicholson Co., Contr., 102 W. Clinch Ave., let following sub-contracts on \$30,000, 1-story and part basement, brick and frame, 170x59-ft. school: Heating, plumbing and wiring, Tennessee Electric & Plumbing Co., Etowah; cut stone, John Troutt Co., 204 East 11th St., Chattanooga; brick, Cleveland Coal & Feed Co.; millwork, Stivers Lumber Co.; Clarence T. Jones and R. Maxwell James, Archts., Provident Bldg., Chattanooga. 12-15

Tex., Canyon—James T. Taylor, Contr. First Natl. Bank Bldg., Fort Worth, let following sub-contracts on \$235,584 building, West Texas State Teachers' College: Electric work, Broome Electric Co., 102 W. Sixth St., Amarillo; Brown windows, glazed and erected, Universal Building Products Co., Slaughter Bldg., Dallas; structural, miscellaneous, ornamental and reinforcing, North Texas Iron & Steel Co., 1401 N. Adams St., Fort Worth; painting, J. D. Curd, Ablemen, Jones and R. Maxwell James, Archts., Provident Bldg., Chattanooga. 12-8

Tex., LaSara—LaSara Independent School District, Mr. Brownfield, Pres., Board of Trustees, let contract to A. W. Neck & Son, Brownsville, at \$20,700, for 1-story, 4-classroom and auditorium, Spanish type, semi-fireproof school building; tile walls, stucco exterior, plaster interior, reinforced concrete foundation; plumbing to Hub Plumbing Co., Pharr; electric wiring, Weslaco Electric Co.; R. Newell Waters, Archt., both Weslaco. 12-29

Tex., San Antonio—St. Mary's University, let contract to Heath-Kinsey Construction Co., 401 Builders Exchange, at \$48,055, for 1 and 2 story, 180x120-ft., reinforced concrete, brick and stucco gymnasium building; plumbing to Chalkley Bros., 1772 Navarro St.; wiring, Braden-Hudson-Wangler; Leo M. J. Dielmann, Archt., 306 E. Commerce St., all San Antonio. 12-22

Va., Radford—School Board, Mrs. F. M. Jones, Clerk, let contract to E. S. Glover, Bristol, Tenn., for \$90,000 High School building; heating and plumbing to Morris Miller & Sons, Christiansburg; D. R. Beeson, Archt., Johnson City, Tenn. 12-15

### Stores

Ala., Birmingham—Doster-Dorthington, Inc., J. T. Doster, Pres., 2108 First St., wholesale druggists, let contract to Southern Ferro Concrete Co., 70 Ellis St., N. E., Atlanta, Ga., for \$500,000, 5-story, basement and mezzanine building at cor. 17th and First Ave.; reinforced concrete with terra cotta front and granite base, all floors of terrazzo, marble vestibule, automatic passenger elevator,

2 freight elevators, 2 automatic package elevators, circulating ice plant; Miller & Martin, Archts., Title Bldg. 1-5

Ala., Selma—Bowie Smith erecting 1-story, brick 3-store building at Alabama and Franklin Sts.; C. A. Crosby, Contr.

Ark., Little Rock—S. S. Harris let contract to McGregor & Pickett, 4801 N. Lookout St., for \$10,000 store at 2817-21 Prospect Ave.

Fla., Tampa—Bentley-Trezevant, Inc., 608 Tampa St., let contract to G. A. Hanson Co., Inc., 215 Madison St., for 2-story, \$40,000 store and office building on Florida Ave.

Ga., Waycross—L. B. Harrell let contract to T. J. Darling for 3-story, brick and steel, 60x110 ft., furniture store; Roy A. Benjamin, Archt., Bisbee Bldg., Jacksonville, Fla.

Ia., Jena—Owen Brothers, Contrs., erecting 2 brick buildings, one to be occupied by Jitney-Jungle Store, Lloyd Whatley, Mgr., and other by Watson Bros. & Coleman.

Mo., Exeter—Edgar O. Bowman received contracts to rebuild business section, recently burned.

Mo., Marshall—Mrs. Sam H. Smith let contract to Ed E. Page for 2 store buildings on E. North St.

Mo., St. Louis—E. Eastman, 110 Franklin St., let contract to Duncan & Garrison, 1105 Chestnut St., for \$10,000, 2-story, 75x22 ft., brick store and tenement, 4025 Easton St.; concrete roof, steam heat; M. Garrison, Archt., 1105 Chestnut St.

Mo., St. Louis—Withers Loan and Mercantile Co., 2001 Market St., let contract to A. G. London, 6145 Pershing St., for \$17,500, 1 and 2-story, brick, 91x56 ft. stores and offices at 2600-8 Olive and 211 N. Jefferson Sts.; composition roofs, steam heat; H. W. Guth, Archt.

Mo., St. Louis—H. & E. Freund, 409 Wainwright Bldg., let contract to Huger & Buecker Construction Co., 409 Wainwright Bldg., for \$26,750, 80x118 ft., 2-story, brick store building, 2730-2 N. Grand Ave.; Wedemeyer & Nelson, Archts., 824 Wainwright Bldg.

Mo., St. Louis—Aeolian Co., 1004 Olive St., let contract to Wm. H. Smith-Nelson Cunliff Co., 410 N. Euclid St., alter 6-story store recently burned; \$20,000.

N. C., Charlotte—Abbott Realty Co., let contract to J. A. Jones Construction Co., Realty Bldg., for \$25,000, 2 story and basement business and apartment building, Hawthorne Lane and Elizabeth St.; brick walls, concrete footings, Indiana limestone trim, plate glass, built-up roof, concrete and wood floors, steam heat; Charles C. Hook, Archt., Johnston Bldg.

S. C., Columbia—James L. Tapp Store, C. S. Lemon, Mgr., expend \$50,000 for enlargement; 70-ft. addition on first and second floors; add 70x100-ft. basement, new entrance on Blanding St., etc.; heating to A. W. Holler & Co., 1413 Taylor St.; Robert Eisenschmidt, Archt., 2216 Park Ave.; J. T. Dabbs, Contr., 301 Saluda Ave.

Tex., Eddough—A. Matthews, Chicago, Ill., let contract to M. L. Irons for \$15,000, 50x110 ft. building; provide space for 4 stores, concrete floors, plate glass windows.

Tex., Floydada—J. R. Readheimer let contract to H. E. Cannaday, for \$21,000, brick, 100x50 ft., business building on W. California St.

Tex., Harlingen—R. P. Blythe, Contr., Box 382, completed foundation for \$80,000, 2-story store and office building, cor. Van Buren and Commerce Sts., for John Baker; reinforced concrete skeleton, hollow tile and brick walls, concrete floors, built-up roof, concrete foundation for 6-story building; R. W. Mulhausen & Co., Archts.; Gardner & Howe, Engrs., Kirby Bldg., Dallas. See Want Section—Building Materials and Equipment. 1-5

W. Va., Martinsburg—John Julius let contract to F. O. Trump for \$40,000, 3-story, Indiana limestone front building at 120 N. Queen St., first floor for store, offices and apartments above.

W. Va., Wheeling—Chris W. Heil, Tiltonsville, Ohio, erect 3-story and basement, 50x80 ft., brick and reinforced concrete business block, Fifth and Hanover Sts.; Albert F. Dayton, Archt., 1506 Market St.; Elm Grove Building Material Co., Elm Grove, Wheeling. See Want Section—Building Materials and Equipment. 1-12

#### Theaters

La., Slidell—A. Carolla and Peter Lalumina let contract to John M. Middleton, Hammond, for \$30,000, 60x120 ft., brick motion picture theater; lobby in center with stores and office in each side, 650 opera chairs in

main auditorium, 150 chairs in balcony; cooling and steam heating systems; leased to B. V. Sheffield.

Mo., Columbia—J. Dozier Stone let contract to S. E. Schults, Chillicothe, and Belvedere Apartments, Columbia, for \$250,000 New Missouri Theatre, corner Ninth and Locut Sts.; excavation work sub-let to Tiger Transfer Co.; Boiler Brothers, Archts., 110 W. 10th St., Kansas City. 1-12

#### Warehouses

Md., Baltimore—Vilma Amusement Co., care G. Gardner, Red Wing Theater, Monument St. and Patterson Park Ave., erecting \$30,000, 60x112-ft., 1-story, brick theater building at Belair Road and Mayfield Ave.; E. Eyring & Sons Co., Contrs., 808 E. Third St. 11-10

Mo., Farmington—Lead Belt Amusement Co. erecting \$30,000 theater building, seat 1000.

Mo., St. Louis—Missouri Rolling Mills Corp., 6800 Manchester St., received contract for 300 tons reinforcing steel for \$750,000, 6-story warehouse of Stix, Baer & Fuller Dry Goods Co. 12-29

Mo., St. Louis—S. Baskowitz & Son, 209 Bremen St.; \$10,000; S. Abrahams & Son, Archts.-Builders, 1124 Chemical Bldg.

Tex., San Angelo—J. W. Neves, Contr., completed foundation footings for \$17,000, 50x200 ft. warehouse for West Texas Lumber Co.

Tex., San Antonio—Southwest General Electric Co., City Natl. Bank Bldg., let contract to J. E. Dickey, 216 Eleanor St., at \$19,203, for reinforced concrete, brick, hollow tile and steel warehouse, N. San Marcos St.; Henry T. Phelps, Archt., Hicks Bldg. 12-29

Tex., San Antonio—Walter P. Shafer, St. Mary's St., let contract to Lon T. Wright & Co., 910 Builders Exchange Bldg., for \$10,000, 1-story, brick and tile warehouse and office building; George Willis, Archt., 810 Builders Exchange Bldg.

#### Trade Literature

##### A Fine and Useful Desk Calendar.

The Maryland Metal Building Company, Inc., Baltimore, Md., manufacturers of sectional metal buildings of Lyonore metal, have sent to each of their customers and friends a "Workaday Calendar and Memo. Desk Pad." This calendar has a sheet for each day of the year, with a small, complete calendar for the current month in the upper left-hand corner and a similar calendar for the ensuing month in the upper right-hand corner, so that they are handy for immediate reference. The date of each day on the daily sheets is large and below is ample space to make daily memoranda on red lines, neatly ruled. The pad of sheets is held to the backing by ornamental brass bolts and the entire device constitutes a handsome desk ornament of practical value.

##### Pennsylvania Pump Bulletin.

The Pennsylvania Pump and Compressor Company, Easton, Pa., have issued Bulletin No. 209, which is devoted to describing and illustrating their centrifugal pumps, double suction, single stage. This bulletin of 16 pages is bountifully illustrated with pictures of complete machines and also of details concerning their construction. The descriptions are also full and accurate. The bulletin is punched for quick filing.

##### Atlas Conveyor Co. Bulletin.

Atlas ash gates, ash hoppers and furnace bottoms are comprehensively described and illustrated in a bulletin of eight large pages issued by the Atlas Conveyor Company, 20 South Fifteenth street, Philadelphia, who also build other coal and ashes handling machinery, skip hoists, cable power scrapers, conveyors, etc. Outline diagrams accompanying the reading matter show in details the various parts and operations of the devices described.

#### Calendars, 1928.

The International Harvester Company of America (McCormick-Deering), Chicago, Ill., have issued a large and fine wall calendar, with big date sheets, which can be easily read across a wide room. The figures and accompanying lettering are in white on a dark green background, with a large picture at the top of each date sheet. The Chesapeake Waste Paper Company, Baltimore, Md., have also published a large wall calendar, with large dates in black on white background, the whole being printed in red and black. Another big wall calendar is that of the Galion Iron Works and Manufacturing Company, manufacturers of graders and other road machinery. It has a panoramic view of the plant at Galion, Ohio, together with several smaller illustrations of different products of the company. The calendar is finely printed in three colors. The International Trucks and Coaches, made by the International Harvester Company, Chicago, are featured in an excellent hanger calendar, three months to a page, all being artistically done in several colors. The Carnegie Steel Company, Pittsburgh, Pa., has issued what it calls a "Safety Calendar," which emphasizes the doctrine of safety in industrial plants and elsewhere. Each year the company puts into competition among its own plants a safety trophy, that for this year being made of bronze and silver. It is more than a yard in height and is a most artistic production. The calendar is neat and practical.

#### Universal Vacuum Dry Kiln.

"Modern Dry Kiln Engineering" is a monthly publication of the Universal Vacuum Dry Kiln Company of Kansas City, Mo., and two recent issues at hand contain much valuable information and sundry hints and suggestions concerning the Universal Vacuum Dry Kilns made by this firm. One of the articles is a description of the Universal installation made at the Memphis Stave Company mill of the Charles Wunderlich Cooperage Company of St. Louis. Another article directs attention to the statement that proper kiln drying of wood requires positive control of the elements of heat, humidity and circulation. Another contribution, "Kiln Drying Vital to Quality," is by Walker L. Welford, president of the Chickasaw Wood Products Company of Memphis, Tenn. There are sundry pictures.

#### Iron and Steel Year Book.

The Year Book of the American Iron and Steel Institute for 1927 has been issued from the headquarters of that organization, 75 West street, New York city. It is a substantial volume of 530 pages, containing complete reports of the May and the October meetings. There are a number of articles concerning various processes in steel manufacture, including the operation of large hearth furnaces using coke made from 100 per cent volatile coal, application of welding to a steel structure, centrifugal casting processes, the evolution of the wide strip mill, behavior of coke in the blast furnace, etc.

#### Walworth Values in Power Plants.

The Walworth Log for January, published by the Walworth Company, manufacturers of valves, Boston, Mass., is a most attractive and informative periodical. The leading article, "High Steam Pressures and Temperatures," by E. S. Cooley, industrial engineer, New York city, describes and illustrates several important power plants, including that of the Louisiana Power Company at Sterlington, La. There are several other good articles, likewise, illustrated, concerning the Walworth product.

# WANT SECTION

**THE CLASSIFICATIONS IN THIS SECTION ARE:**

**Machinery and Supplies**

**Automatic Ice Cream Cone Rollers, etc.**—Robt. D. Rostrup, 7130 West End Blvd., New Orleans, La.—Wants data on automatic ice cream cone rollers and cone oven machines; correspond with manufacturers.

**Boiler.**—See Engine and Boiler.

**Broom Making Machinery.**—Twiss Transfer Co., 852 Fourth Ave. S., St. Petersburg, Fla.—Wants machinery for making brooms.

**Creamery Equipment.**—Stanley P. Dowdy, Sec., Gassaway Chamber of Commerce, Gassaway, W. Va.—Wants data on establishing and operating creamery.

**Electric (Water Well) Pumps.**—Curtis P. Moore, E-106 Ninth Ave., North St., St. Petersburg, Fla.—Wants prices on electric pump for soft water well.

**Engine (Logging).**—C. W. Denning & Co., Sylva, N. C.—Wants narrow gauge logging engine.

**Engine and Boiler.**—J. H. Black, Agent, Box 283, Barboursville, Ky.—Wants 25 or 30 h.p. portable engine and boiler on wheels; new or rebuilt equipment, state condition.

**Fertilizer Mixing Plant.**—The Blount-Harvey Co., Inc., Greenville, N. C.—Wants small fertilizer mixing plant.

**Filter Press.**—Mid-State Petroleum Co., Inc., 8th and Watkins Sts., Alexandria, La.—Wants one Sweetland filter press.

**Fire Fighting Equipment.**—H. W. Hartman, Mayor, Prague, Okla.—Wants good fire truck pumper with auxiliary chemical tank and capacity for carrying at least 1000 ft. hose.

**Generator Set.**—V. M. Nussbaum & Co., 220 Montgomery St., Fort Wayne, Ind.—Wants 200 kv-a 220 volt, 3 phase, 60 cycle direct connected steam engine generator set; used simple non-condensing set is preferred, must b guaranteed good condition.

**Hoist.**—H. W. Dexter (Mchly. Dealer), 22 Laura St., Jacksonville, Fla.—Wants 2 drum gasoline hoist, 25 to 35 h.p., used equipment.

**Motor.**—Hackley Morrison Co., Inc., 204 N. Jefferson St., Richmond, Va.—Wants 150 h.p., 3 phase, 60 cycle, 2300 volts, 1200 r.p.m. motor with base and pulley, prefer slip ring variable speed type with controller and resistance grids.

**Press (Baling).**—Mt. Airy Overall Co., Mount Airy, N. C.—Wants press for packing overall in bales for shipping.

**Printing Equipment.**—O. L. Bond, Pine St., Wiggins, Miss.—Wants equipment for printing shop.

**Pump (Bilge).**—E. U. Roddy, care of Citizens Bank, West Palm Beach, Fla.—Wants bilge pump with motor attached for 12 volt battery.

**Steel Wire.**—W. R. Furr, Jr., Box 3810, Tampa, Fla., wants prices on steel wire for filling sweeper brooms.

**Sorine Chemical Co.**—C. B. Gallaher, V. Pres., 614 Rhodes Bldg., Atlanta, Ga., wants prices on following:

(1) Bottling Machine

(2) Soap Making Equipment.

O. B. Dunkle, Supt., Substation No. 6, Denton, Tex., wants prices on following equipment for laboratory and office:

(1) Agricultural Laboratory Equipment and Furniture

(2) Cleaners and Threshers—small grain plat and nursery

(3) Cotton Gin and Cleaner—experimental plat

(4) Office Equipment and Furniture.

W. A. Carver, Rougemont, N. C., wants prices on following:

(1) Electric Generator—80 to 100 h.p.

(2) Water Wheel—develop 80 to 100 h.p. under 22 ft. head.

Stowers Lumber & Manufacturing Co., Harriman, Tenn., wants prices on following:

(1) Dry Kiln Equipment

(2) Generator—first or second-hand, 350 h.p.

(3) Hardwood Flooring Machinery

(4) Metal Fireproof Mill Building

(5) Motors—first class rebuilt, electric.

**Building Materials  
and Equipment**

**Bids Asked**

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

*Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.*

The D. Q. S. Brick Co., Berlin, Md., wants following second-hand equipment:

- (1) Cars—3 clay, side dump, 24-in. gauge and about 1-yd. capacity
- (2) Digger—1/4 to 1/2 yd. crawler type
- (3) Locomotive—2 or 2½ ton motor driven, for 24-in. gauge track
- (4) Track—1/4 mile of 24-in., with 2 switches

Cape Battery & Supply Co., 819 Broadway, Cape Girardeau, Mo., wants prices on following:

- (1) Automatic Electrical Testing Equipment
- (2) Motor Rewinding Equipment.

Austin & Co., 307 Twenty-second St., Galveston, Tex.—Wants data on installation of "dry ice" plants; correspond with manufacturers of equipment.

St. Landry Wholesale Grocery, Inc. (Candy Dept.), Opelousas, La., wants following equipment:

- (1) Candy Mixers
- (2) Nougat Cutters, etc.

**Miscellaneous**

**Cabinet.**—The Alexander Milburn Co., 1416-28 W. Baltimore St., Baltimore, Md.—Wants wood cabinet size 41½x25, having 3 or 4 drawers, each 1¾-in. deep.

**Crushed Stone, Marble, etc.**—G. J. Montague, Box 23, Pensacola, Fla.—Wants crushed stone, particularly marble dust and chips and marble quartz in carload lots to make cement casts, ornaments and figure work.

**Household Novelties.**—J. S. Wilson, Bailey, N. C.—Wants data on household novelties or utensils; correspond with manufacturers.

**Office Fixtures and Furniture.**—Real Estate Trust Co., 1203 General Bldg., Knoxville, Tenn.—Wants inexpensive fixtures and furniture for office.

**Plastic Lath.**—William E. Tuck (Mfrs. Agent), Box 55, Hampton, S. C.—Wants data on plastic lath; correspond with manufacturers.

**Scientific Equipment for Field and Laboratory.**—P. B. Dunkle, Supt., Substation No. 6, Denton, Tex.—Wants scientific equipment for conducting experimental field and laboratory work; appreciate catalogs from manufacturers.

Miami Builders Exchange, Leon E. Reynolds, Editor, Miami, Fla.—Wants manufacturers and dealers catalogs of every description for file; installing construction papers and other data of interest to builders, architects, and owners.

Fredericksburg Co-operative Creamery, Inc., Fredericksburg, Tex., wants prices on following:

- (1) Cans—milk, cream and ice cream
- (2) Cartons—ice cream and butter
- (3) Tubs
- (4) Creamery Supplies, etc.

Dewey County Publishing Co., Inc. (Jobbers), Drawer 387, Seiling, Okla., wants purchase following from manufacturers:

- (1) Calendars—Commission basis
- (2) Cards—greeting, commission basis
- (3) Furniture—school
- (4) School Supplies
- (5) Office Supplies
- (6) Paper.

Sorine Chemical Co., C. B. Gallaher, V. Pres., 614 Rhodes Bldg., Atlanta, Ga., wants prices on following:

- (1) Bottles—1, 2, 6 and 14 oz. glass, in quantities
- (2) Containers—soldered tin, coated and printed one color, in pints, quarts and gallon sizes, with and without spray tops, for Fly Spray
- (3) Jugs—1 gal., in five to fifty thousand lots
- (4) Gum Labels—printed gum, sizes 2x3, 2x4, 4x5 in. two color padded, 100 to the pad, in five to fifty thousand lots.

**Building Material and Equipment**

Lamella Trussless Roof Co., 801 Kirby Bldg., Houston, Texas, wants prices on following for \$68,000 International Exposition building at San Antonio:

Roofing—built-up.

Piedmont Contracting Co., Chester, S. C., wants prices on following for \$30,000 freight depot at Gastonia, N. C.:

**Brass or Bronze Work**

Cast Stone  
Flooring  
Limestone  
Metal Doors  
Roofing—built-up  
Steel Sash and Trim.

Beacham & LeGrand, Archts., Medical Bldg., Asheville, N. C., want prices on following for brick and tile hospital, Marion, N. C.:

Cast Stone  
Dumb Waiters  
Elevators  
Flooring—hardwood, composition  
Inclinator  
Limestone  
Marble  
Metal Doors  
Plaster Board  
Roofing—asbestos shingle, tile  
Steel Sash and Trim  
Tile—hollow  
Ventilators  
Wire Glass.

Albert F. Dayton, Archt., 1506 Market St., Wheeling, W. Va., wants prices on following for 3-story and basement business block:

Cast Stone  
Elevators  
Flooring—hardwood and tile  
Metal Ceilings and Doors  
Plaster Board  
Roofing—built-up  
Tile—hollow  
Wire Glass.

Perkins, Chatten & Hammond, Archts., 160 N. LaSalle St., Chicago, Ill., wants prices on following for \$375,000 High School and \$90,000 Elementary School at Fort Smith, Ark.:

Cast Stone  
Dumb Waiters  
Electric Refrigerators  
Flooring—hardwood and terrazzo  
Limestone  
Marble  
Rolling Partitions  
Roofing—asbestos shingle and built-up  
Steel Sash and Trim  
Ventilators  
Wire Glass.

Warran, Knight & Davis and Chandler C. Young, Asso. Archts., 500 Amer. Natl. Bank Bldg., Pensacola, Fla., wants prices on following for 2-story bank building addition:

Flooring—linoleum, terrazzo  
Marble  
Roofing—built-up  
Steel Sash and Trim  
Tile—hollow  
Terra Cotta Trim  
Vaults  
Wire Glass  
Brass or Bronze Work.

Rev. J. C. Wells, Pastor, Baptist Church, Senatobia, Miss., wants prices on following for \$18,000 to \$20,000 church:

Art Glass Windows  
Blackboards  
Electric Fixtures  
Flooring—hardwood, linoleum, tile  
Roofing—asphalt shingle, slate, tile  
Seating—pews and chairs  
Tables  
Ventilators  
Wire Glass  
Brass or Bronze Work:

Also wants sub-bids on:

Electric Lighting  
Heating  
Plumbing.

R. P. Blythe, Contr., Box 382, Harlingen, Texas, wants prices on following for \$80,000 2-story store and office building:

Flooring—tile  
Painting  
Plastering  
Plumbing  
Roofing—built-up  
Tile—hollow  
Wiring.

## CONSTRUCTION DEPARTMENT

## Manufacturers Record

L. Baylor Pendleton, Archt., 110 N. Seventh St., St. Louis, Mo., wants prices on following for hospital addition:

**Elevators**  
Flooring—linoleum, terrazzo, tile

**Incinerator**

**Roofing—composition**

**Tile—hollow**

**Terra Cotta Trim.**

Hodgson-Jones Construction Co., Inc., N. Perry St., Montgomery, Ala., wants prices on following for remodeling 8-story hotel:

**Flooring—tile**

**Tile—hollow.**

Lindell Trust Co., Grand Blvd. and St. Louis Ave., St. Louis, Mo., wants prices on following for \$150,000 bank and office building:

**Elevators**

Flooring—hardwood, tile

**Limestone**

**Marble**

**Vaults**

**Vault Lights**

**Wire Glass**

**Brass or Bronze Work.**

N. W. Overstreet, Archt., Miss. Fire Insurance Bldg., Jackson, Miss., wants prices on following for \$60,000 school at Picayune:

**Cast Stone**

**Roofing—built-up**

**Steel Sash and Trim**

**Ventilators.**

Mrs. Paul Parker, Lexington, Tenn., wants prices on following for \$16,000 hotel:

**Decorating**

**Dumb Waiters**

**Electric Refrigerators**

Flooring—composition

**Heating**

**Plumbing**

**Roofing—slate**

**Terra Cotta Trim**

**Ventilators**

**Wire Glass.**

O. J. Southwell, Archt., 206 Haas-Howell Bldg., Atlanta, Ga., wants prices on following for \$47,000 dwelling:

**Electric Refrigerators**

Flooring—hardwood, linoleum, tile

**Incinerator**

**Marble**

**Metal Doors**

**Roofing—slate**

**Brass or Bronze Work.**

J. H. Weems, 308 Second Ave., Hattiesburg, Miss., wants catalog on plumbing and prices on following for \$35,000 church and Sunday school:

**Cast Stone**

**Heating**

**Iron Columns and I Beams**

**Metal Ceilings**

**Millwork**

**Plaster Board**

**Price on No. 14 Wire Conduit or Bids on Complete Wiring Job**

**Roofing—asbestos shingle**

**Steel Trusses**

**Ventilators.**

## Bids Asked

**Accounting Machine.**—Purchasing Agt., Post Office, Washington, D. C.—Receives bids Jan. 25 for cash accounting machine.

**Ammonia.**—U. S. Shipping Board, Washington, D. C.—Receives bids Jan. 23 for anhydrous ammonia for period of 5 and 6 months, beginning March 1.

**Automobile Parts.**—Quartermaster Depot, Camp Holabird, Md.—Receives bids Jan. 23 for quantity of miscellaneous automobile parts.

**Benches (Park).**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 23 for 60 park benches.

**Boiler.**—Purchasing and Contracting Officer, San Antonio air depot, San Antonio, Tex.—Receives bids Jan. 20 for one 50 h.p. boiler.

**Bridge.**—Kissimmee, Fla. See Construction News—Bridges, Culverts, Viaducts.

**Bridge.**—West Palm Beach, Fla. See Construction News—Bridges, Culverts, Viaducts.

**Bridge Abutment.**—Belzoni, Miss. See Construction News—Bridges, Culverts, Viaducts.

**Bridge, etc.**—State of North Carolina. See Construction News—Roads, Streets, Paving.

**Brushes (Hand, Floor Scrubbing).**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 23 for 1440 hand, floor scrubbing brushes.

**Buffing Outfit.**—Purchasing Agt., Post Office Dept., Washington, D. C.—Receives bids Jan. 20 for electric driven flexible shaft buffing outfit.

**Castings.**—U. S. Engr., Jacksonville, Fla.—Receives bids Jan. 23 for suction and discharge pipe castings.

**Crematory.**—City Comr., Jackson, Miss.—Receives bids Feb. 21 for building crema-

tory in accordance with plans and specifications; alternate bids of other types of 50 ton daily (10 hrs.) capacity will be accepted; A. J. Johnson, City Clerk; Peter A. O'Brien, City Engr.

**Culvert.**—Austin, Tex. See Construction News—Bridges, Culverts, Viaducts.

**Disinfectant.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Jan. 24 to furnish 2,000 gal. disinfectant; delivery Hampton Roads, Sewall's Point, Va. Sch. 375.

**Dredge.**—U. S. Engineer, Philadelphia, Pa.—Receives bids Jan. 26 for hydraulic dredge.

**Drilling.**—J. B. Seay, Purchasing Agt., Asheville, N. C.—Receives bids Jan. 24 to furnish labor, tools, machinery, equipment, material and everything necessary for drilling of approximately 1800 ft. diamond drill holes at Pink Beds dam site; Howerton Engineering Co., Engrs., Asheville, N. C.

**Earth Ramp.**—Geo. M. Sudduth, Sec., Warren County Highway Coms., Vicksburg, Miss.—Receives bids Jan. 27 to build earth ramp at south approach and fill at north approach to new Skilletullah bridge.

**Electric and Telephone Supplies.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Jan. 26 to furnish electric and telephone supplies, delivery Quantico, Va. Sch. 381.

**Engine.**—City Coms., Vernon, Tex.—Receives bids Feb. 6 for 300 h.p. or 720 h.p. Diesel engine directly connected to one kv-a, 2300 volt, 3 phase, 60 cycle alternator together with suitable belt driven exciter and switchboard panel; to be installed in municipal light and water plant, foundation furnished by the City; H. D. Hockersmith, Mayor.

**Fire Hose.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 22 for 1750 ft. of 1½-in. fire hose, linens, unlined, 50 ft. lengths with 1½-in. couplings, etc.

**Fish Oil.**—Director of Purchase and Sales, Department of Agriculture, Washington, D. C.—Receives bids Jan. 20 for 3300 gals. light pressed fish oil.

**Floor Machines.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 20 for 5 floor machines, to operate on 110 volt, A.C. 60 cycle, single phase.

**Fuel Oil.**—U. S. Engr., Charleston, S. C.—Receives bids Jan. 23 for fuel oil.

**Furniture.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 26 for 6 breakfast suites, consisting of 4 chairs, drop leaf table and one server.

**Furniture and Equipment.**—Dade County Comr., Hugh Peters, Chrmn., Miami, Fla.—Receives bids Feb. 15 for furniture and equipment for Court House and special rooms; A. Ten Eyck Brown, Archt.; August Geiger, Associate Archt., 1007 Huntington Bldg., Miami, Fla.

**Gold Plate for Clasps.**—U. S. Veteran Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 25 for 500 dwt. gold plate for clasps, 26 gauge, 5dwts. to the piece.

**Grading.**—U. S. Engr., Jacksonville, Fla.—Receives bids Jan. 25 for grading grounds within north U. S. reservation at Miami Beach, Fla.

**Gravel.**—State of Louisiana. See Construction News—Roads, Streets, Paving.

**Gravel.**—State of Louisiana. See Construction News—Roads, Streets, Paving.

**Hardware.**—Quartermaster, Marine Corps, Washington, D. C.—Receives bids Jan. 20 for pinch bars, machine bolts, hammers, mallets, etc.

**Kitchen Equipment.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Jan. 24 for meat knives, coffee mills and flour sifters. Sch. 314.

**Lumber.**—Chemical Warfare Service, Edgewood Arsenal, Md.—Receives bids Jan. 20 for rough yellow pine, sheathing, pine flooring and lumber.

**Lumber.**—Chancery Clk. of Warren County, Vicksburg, Miss.—Receives bids Feb. 7 for furnishing county with creosote bridge lumber, timber and piling for year 1928.

**Meters.**—City of Houston, Tex., J. C. McVea, City Engr.—Receives bids Feb. 1 for one 16-in. Venturi meter with recording instruments, and recording instruments for one 8-in. meter at North Side sewage disposal plant; furnish sludge pumping and motor equipment.

**Ophthalmic Instruments and Appliances.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 28 for ophthalmic instruments and appliances.

**Paper and Envelopes.**—Joint Committee on Printing, George H. Carter, Public Printer, Washington, D. C.—Receives bids Jan. 30 for furnishing paper and plain envelopes

for public printing, binding and departmental use in District of Columbia, for 1 yr. beginning March 1; deliveries f. o. b. Washington.

**Paving.**—State of Alabama receives bids for paving in 3 counties. See Construction News—Roads, Streets, Paving.

**Piling.**—U. S. Engr., Kansas City, Mo.—Receives bids Jan. 20 for 10,000 yellow pine piles.

**Pipe (Cast Iron).**—See Pumping Plant.

**Pipe (Cast Iron).**—See Water Mains.

**Pipe, etc.**—Quartermaster Corps, Army and Navy General Hospital, Hot Springs, Ark.—Receives bids Jan. 20 for 1060 ft. pipe, 12 radiators, 4 strainers, 28 return traps, 2 gate valves and 18 radiator valves.

**Platform Scale, etc.**—Board of Awards, care of City Register, City Hall, Baltimore, Md.—Receives bids Jan. 25 for construction platform scale and scale house; C. F. Goob, Ch. Engr.

**Plumbing Supplies.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Jan. 26 to furnish plumbing supplies, delivery Quantico, Va. Sch. 378.

**Plumbing Supplies.**—Quartermaster, Marine Corps, Washington, D. C.—Receives bids Jan. 26 for tin bands, reducing elbows, tees, discs, galvanized steel pipe.

**Pontoons.**—U. S. Engineer Office, 1068 Navy Bldg., Washington, D. C.—Receives bids Jan. 26 to construct and deliver 20 steel pontoons.

**Portland Cement.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Receives bids Jan. 26 for portland cement; Sch. No. 1852.

**Pumping Machinery.**—See Pumping Plant.

**Pumping Plant.**—Town of DeKalb, Miss., Henry A. Mentz, Consit. Engr., Hammond, La.—Receives bids Feb. 10 for following: Furnishing cast iron water mains and fittings, steel water pipe and fittings, valves, boxes and hydrants, and house service material; constructing water lines, 50,000 gal. concrete reservoir, brick pumping station, all concrete foundation work; installing connection around plant; furnishing and installing elevated steel tower and tank; furnish and install complete all pumping machinery and equipment; sinking one or more tubular wells and installing necessary pumping equipment; building spring wells, necessary gravity line and 20,000 gal. collecting basin.

**Rectifier.**—Purchasing Agt., Post Office Dept., Washington, D. C.—Receives bids Jan. 25 for rectifier for charging storage batteries.

**Road.**—State of Louisiana. See Construction News—Roads, Streets, Paving.

**Roads.**—State of North Carolina receives bids for 12 roads. See Construction News—Roads, Streets, Paving.

**Roads.**—State of Louisiana receives bids for 6 roads. See Construction News—Roads, Streets, Paving.

**Road Grader, etc.**—Neshoba County Board of Supervs., E. G. Moore, Chancery Clk., Philadelphia, Pa.—Receives bids Feb. 7 for 6 mule road grader machine for Dist. No. 1 and one Adams road maintainer, for Dist. No. 3.

**Road Grader.**—Humphreys County Supervs., Belzoni, Miss.—Receives bids Feb. 6 for 8-ft. road grader complete for road district No. 1; delivery Belzoni! A. R. Hutchens, Clerk.

**Road Machinery.**—Supvg. Board of Road Dist. No. 1, Beauregard Parish, D. W. McFatter, Sec., DeRidder, La.—Receives bids Jan. 24 for 30 crawler type tractors; Adams leaning wheel grader No. 8 with steerable tongue.

**Saddlery.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Jan. 27 to furnish saddlery, delivery Quantico, Va. Sch. 379.

**Sand.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Jan. 20 to furnish 300 cu. yds. sand, delivery Quantico, Va. Sch. 380.

**Sewers.**—Board of Public Service, St. Louis, Mo., E. R. Kinney, Pres.—Receives bids Jan. 24 for construction of public relief sewers, known as Section B-1, Western Mill Creek Public Relief sewers; approximate quantities 1030 cu. yds. A excavation, 880 cu. yds. B excavation, 7620 cu. yds. C excavation; sewer pipe: horseshoe shaped sewer of reinforced concrete; lumber; removal of old conc. base; Type 7 A, B and C tunnel complete; reinforcing steel bars; junction chamber, etc.

**Street.**—Gulfport, Miss. See Construction News—Roads, Streets, Paving.

**Street.**—St. Louis, Mo. See Construction News—Roads, Streets, Paving.

**Street.**—Baltimore, Md. See Construction News—Roads, Streets, Paving.

**Street.**—Perry, Ga. See Construction News—Roads, Streets, Paving.

**Surgical Instruments, etc.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 20 for surgical instruments and accessories.

**Table.**—Purchasing Agt., Post Office Dept., Washington, D. C.—Receives bids Jan. 23 for wood table.

**Tables (Kitchen).**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 24 for 7 kitchen tables, porcelain top.

**Tank.**—Constructing Quartermaster, Ft. Benning, Ga.—Receives bids Feb. 3 for construction and completion of 1,000,000 gal. steel or reinforced concrete standpipe, with foundations, valves, and connections with post system.

**Tank and Tower.**—See Pumping Plant.

**Tank Trucks.**—Volunteer State Oil Co., Box 676, Knoxville, Tenn.—Receives bids about Jan. 21 for tank trucks.

**Textiles.**—Quartermaster Depot, Philadelphia, Pa.—Receives bids Jan. 23 for silesia, cotton cloth, handkerchief cloth, indigo blue denim and cotton sheeting.

**Timber.**—U. S. Engr., Huntington, W. Va.—Receives bids Jan. 23 for 840 pieces white oak timber.

**Truck.**—Geo. M. Sudduth, Sec., Warren County Highway Comsn., Vicksburg, Miss.—Receives bids Jan. 27 for light duty truck fully equipped.

**Truck.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 24 for Riker 3 ton truck, steel dump body, 6 cu. yds. capacity, etc.

**Trucks.**—Quartermaster, Marine Corps, Washington, D. C.—Receives bids Jan. 23 for one  $\frac{3}{4}$ -ton and one 1-ton truck, f.o.b. Sewells Point for Haiti.

**Trucks.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids

Jan. 23 to furnish trucks, delivery Hampton Roads, Va. Sch. No. 369.

**Water Mains.**—R. W. Riggsby, City Mgr., Durham, N. C., Wm. M. Platt, Engr., Durham—Receives bids Jan. 26 for construction of 24-in. cast iron force main from Flat River steam plant to city filtration plant; work includes furnishing and laying 10 mi. of 24-in. A.W.W.A. standard cast iron pipe with necessary fittings and valves; separate tenders received for furnishing materials and for construction.

**Water Works.**—City of Ada, Okla., Homer Jones, Mayor, Black & Veatch, Engrs., Kansas City, Mo.—Receives bids Jan. 19 for furnishing all tools, equipment, labor and materials and construction of pipe, flow line, roofing over and repairing spring outlet, roofing clear well and alterations at plant, building overflow pipe line from city plant to lake and building distribution main extensions; materials include reinforcing concrete, structural steel, roofing, cast iron specials B. C. I. pipe, steel wire mesh, gate valves, fire hydrants, etc.

**Filing Station Equipment.**—Volunteer State Oil Co., Box 676, Knoxville, Tenn.—Receives bids about Jan. 21 for following:

- (1) Files
- (2) Office Furniture
- (3) Pumps
- (4) Storage Tanks.

**X-Ray Equipment.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Jan. 19 for X-ray equipment.

**Water Works.**—Town of Jonesboro, La., W. A. Hart, Mayor, Swanson-McGraw, Inc., Consol. Engrs., 426 Balter Bldg., New Orleans, La.—Receives bids Jan. 31 for material and labor for water works improvements, following approximate equipment and material:

- (1) Fire Pump
- (2) Hydrants, Valves, Fittings, etc.
- (3) Pipe (Cast Iron)—3800 ft. of 8-in., 3000 ft. of 6-in., and 17,700 ft. of 4-in. cast iron pipe, and 5,000 ft. of 2-in. cast iron pipe or steel pipe
- (4) Reservoir—125,000 gal. concrete
- (5) Tank and tower—50,000 gal. steel.

#### Lexington Water-Power Bonds.

Elsewhere in this issue formal announcement is made of the offering to investors of two issues of gold bonds of the Lexington Water Power Company, which is building a hydro-electric plant on the Saluda River near Columbia, S. C. One issue is \$12,000,000 of first mortgage 5 per cent bonds, due in 1968, and the other is \$5,000,000 of 5½ per cent convertible sinking-fund debentures, due in 1953. The offering is made by Halsey-Stuart & Co., Inc.; Pynchon & Co., Bonbright & Co. and Spencer Trask & Co. Particulars concerning these issues will be found in the advertisement.

#### H. E. Tuft Now With Grasselli Chemical.

Harry E. Tuft, mining engineer, became associated on December 1, 1927, with the Grasselli Chemical Company, with headquarters at the main office, Cleveland, Ohio. He was formerly connected with the United States Bureau of Mines at Washington and is the author or co-author of various technical articles on the value of preservation of mine timbers by chemical treatment. Mr. Tuft graduated from the North Dakota School of Mines in 1911, and has made Governmental surveys of the leading mining districts on the consumption, supply, costs and life of mine timbers. The Grasselli Chemical Company, which has been interested in wood preservation for years, is now prepared to assist mine operators and engineers in the study of their mine timber needs and give co-operation.

#### Big Merger of Gear Manufacturers.

A big combination in the manufacture of industrial gears has just been accomplished by the consolidation of the Van Dorn & Dutton Co. of Cleveland, Ohio; the William Ganschow Company of Chicago and Peoria, Ill.; the Fawcett Machine Company of Pittsburgh and Ford City, Pa., and the Ohio Forge Company of Cleveland. Headed by F. W. Sinram, formerly president of the Van Dorn & Dutton Company, this group has pooled its interests under his leadership into what is claimed to be the largest industrial gear-manufacturing corporation in the world. The name "Gears and Forgings, Inc." has been chosen for this combination, as that expresses its broad range of activity; the manufacturer of forgings will now be the manufacturer of gears, so that the operations will be from the raw material to the finished product. The Van Dorn & Dutton Company was founded in 1897; the William Ganschow Company was organized about 50 years ago; the Fawcett Machine Company was organized in 1901; the Ohio Forge Company was organized 25 years ago. Besides gears, there will be produced speed reducers, special machinery, etc., these being now made by one or another of the elements in the combine. F. W. Sinram will be president of the new company. A. F. Cooke of the Fawcett organization will be vice-president and general manager of that division. William Ganschow will be second vice-president and manager of the Ganschow division. J. M. Clem of the Ohio Forge Company will be third vice-president and manager of that division. S. C. Dalbey, also of the latter, will be secretary and treasurer of the new company and also a director, and T. E. Leighton, formerly secretary and treasurer of the Van Dorn & Dutton Company, will be assistant secretary and treasurer and also a director. C. F. Goedke, formerly secretary of the Ganschow Company, will be a director and a district sales manager in the new corporation; his office will be at Chicago. H. B. Newell, formerly of the Fawcett organization, will be a director and also chief engineer of the consolidated company.

## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

#### Shore-Line Builders Branch at Tampa.

Shore-Line Builders, Inc., constructing engineers, Jacksonville, Fla., have opened a new branch office at 725 Stovall's Professional Building, Tampa, Fla., and have appointed W. H. Fetzer as manager there for the Florida West Coast sales district. Increased demand for the construction of Weber seawalls and bulkheads made this extension necessary.

#### Carey Insulated Shingles.

The Philip Carey Company, Lockland, Cincinnati, Ohio, manufacturers of the Carey Cork Insulated Shingles, have sent out to customers an attractive thermometer mounted upon one of their shingles. It is claimed for these shingles that they make a house warmer in winter and cooler in summer; also that they can be put on a roof right over old wood shingles, saving the trouble and expense of stripping the roof before reshingling.

#### Graybar Electric Appointments.

The Graybar Electric Company of New York city has appointed J. F. Davis to be manager at Boston, A. R. Loughborough to be manager at Pittsburgh, H. W. Dye to be service and credit manager at Denver, replacing J. Hageman, credit manager, who has been transferred to St. Louis. Louis Fille has also been elected secretary and Martin Wagner assistant secretary at the main office in New York. Mr. Fille was previously general auditor.

#### Six Moore Dry Kilns.

The Sells Lumber and Manufacturing Company, Knoxville, Tenn., is rebuilding six dry kilns which were recently destroyed by fire. Equipment for six modern kilns, each approximately 16 by 120 feet, has been shipped from the Moore Dry Kiln Company, Jacksonville, Fla., which expects that the installation will be completed and in operation in January.

#### Pumps and Machinery to Be Sold.

Announcement is made elsewhere in this issue that the city of Knoxville, Tenn., will receive sealed bids until 10 o'clock A. M. March 1 for the sale of pumps and other machinery now at the old filter plant and the old pumping station, Wiley W. Thomas being in charge. Particulars will be found in the advertisement.

January 19, 1928

## FINANCIAL NEWS

### Bond Issues Proposed

**Ala., Birmingham**—City Comm., Eunice Hewes, Clk., plans bond election for track elevation and grade crossing elimination; A. J. Hawkins, City Engr.

**Ala., Mobile**—Street—City Engineering Dept. has tentative plans for \$2,500,000 bond issue; Cecil F. Bates, Finance Commr.

**Ala., Mobile**—Road, Bridge—Mobile County Board of Revenue, Arthur D. Davis, Chmn., reported, considering \$5,000,000 bond issue. 10-27

**Ala., Montgomery**—School—State defeated \$20,000,000 bond issue; Bibb Graves, Governor. 8-18

**Ark., Fort Smith**—Municipal Improvement—City plans receiving bids for \$400,000 bonds: \$275,000, paving; \$84,000, sewer; \$50,000, parks and playgrounds; Joseph M. Hill, Judge. 12-15

**Ark., Gurdon**—City, W. W. Stone, Mayor, will call bond election for paving and city hall. 12-18

**Fla., Arcadia**—Road—De Soto County plans \$190,000 bond issue: \$50,000, road; \$140,000, Special Road Dist. 6%. Address County Commrs.

**Fla., Bartow**—School—Polk County Board of Public Instruction, Don Register, Chmn., receives bids Feb. 3 for \$340,000 6% \$1000 denom. Special Tax School Dist. No. 7 bonds.

**Fla., Lake Butler**—Sewer—City considering \$54,000 bond sale. Address City Clk.

**Fla., St. Petersburg**—Water Reserve—City votes Feb. 14 on \$790,000 bonds. Address City Clk.

**Ga., Brunswick**—Municipal Improvement—City Comm., Hugh Burford, Sec., receives bids Jan. 24 for \$200,000 5% \$1000 denom. bonds.

**Ga., Decatur**—School—Druid Hills School Dist. voted \$250,000 bonds; W. A. Rainey, DeKalb County School Supt. 12-8

**La., Franklin**—Bridge—St. Mary Parish Police Jury plans \$20,000 bond election.

**Ga., Jesup**—Road—Wayne County votes Feb. 29 on \$60,000 bonds. Address County Commrs.

**Ga., LaFayette**—School—Lookout Mountain School Dist., Walker County, voted \$18,000 bonds; plan selling bonds. Address School Trustees.

**Ky., Louisville**—Sewer—City, reported, receives bids Feb. 1 for \$1,000,000 4% bonds; Joseph T. O'Neal, Mayor. 12-22

**Ky., Mount Olivet**—Road—Robertson County voted \$75,000 bonds. Address County Commrs.

**La., DeQuincy**—Paving—Town, M. M. Smith, Clk., votes Feb. 14 on \$60,000 bonds; W. E. Holbrook, Mayor.

**La., Oil City**—City votes Feb. 14 on \$100,000 bonds: \$75,000, school; \$25,000, other improvements. Address City Clk.

**Miss., New Albany**—Road—Union County votes Feb. 3 on \$400,000 bonds. Address Board of Supvrs.

**Miss., New Albany**—School—Keownville Consolidated School Dist. voted \$13,000 bonds. Address Union County Bd. of Supvrs. 12-15

**Miss., Paulding**—Jasper County Board of Supvrs. will call election on \$75,000 Stafford Springs Consolidated School bonds.

**Miss., Prentiss**—School—Newhebron Consolidated School Dist., in Jefferson Davis, Simpson and Lawrence Counties, may vote Feb. 3 on \$15,000 bonds. Address Pres. Board of Trustees.

**Miss., Walhall**—Road—Webster County, Beat 3 voted \$50,000 bonds. Address County Commrs.

**Mo., Bonne Terre**—School—Board of Education of Bonne Terre School Dist., J. J. Bowman, Sec., receives bids Jan. 25 for \$50,000 \$1000 denom. 5% bonds.

**Mo., Fair Grove**—School—Board of Education considering bond election.

**Mo., Marshall**—City votes Jan. 31 on \$230,000, \$100 to \$1,000 denom. not to exceed 5% bonds: \$80,000, light plans; \$150,000, sewer. Address City Clk.

**Mo., Pineville**—Road—Pineville voted bonds. Address City Clk.

**N. C., Manteo**—Street—Town, Board of Aldermen, authorized \$10,000 bond issue.

**N. C., New Bern**—Fire Station and Site—City, Board of Aldermen, authorized \$35,000 bond issue.

**N. C., Thomasville**—School—City plans \$85,000 bond election. Address City Clk.

**N. C., Roxboro**—County Home Funding—Person County Commrs. authorized \$13,000 bond issue.

**N. C., Wadesboro**—School—Anson County Commrs. approved loan for Wadesboro and Deep Creek School Districts. Lately noted approved bond issue. 1-12

**Ola., Altus**—Improvement—City considering \$1,000,000 bond election during early part of 1928, for public park and playground, water works and sewer system extensions, paving, etc., including \$250,000 for schools. Address City Clk.

**Ola., Holdenville**—School—Holdenville Board of Education, James D. Rives, Pres., plans calling election soon on \$40,000 bonds.

**Ola., Mountain View**—City voted \$45,000 bonds: \$37,500, sewer; \$7,500, water works. Address City Clk.

**Ola., Muskogee**—School—School Board may call \$20,000 bond election; Charles Gottwals, Pres., Board of Education.

**Ola., Oklahoma City**—Improvement—City, E. M. Fry, Mgr., reported, received high bid from E. H. Rollins & Sons, Chicago, Ill., at \$5,115,822, at 4.228%, average rate of interest, for \$8,269,000 bonds. 12-29

**Ola., Shawnee**—City, Neil Wimmer, Mayor, plans about \$90,000 bond election, as city's share for Santa Fe underpass; \$10,000 bond election for market building.

**Ola., Tecumseh**—Water Works, Sewer—City, H. H. Henderson, Mayor, defeated \$50,000 bond issue. 11-24

**Ola., Tulsa**—School—School Board plans calling election for Jan. 24, on \$1,500,000 bonds.

**S. C., Belton**—City votes Feb. 7 on \$100,000 bonds: \$50,000, sewer; \$25,000, paving; \$25,000, retire existing bonds. Address City Clk.

**S. C., Chester**—Road—Chester County Commrs. receive bids about April 15 for bond election in February.

**S. C., Orangeburg**—School—Board of Trustees, School Dist. No. 26, plans \$300,000 bond issue.

**Tenn., Chattanooga**—Road—City, R. H. Crox, Commr. of Streets and Sewers, plans selling bonds.

**Tenn., Clarksville**—Highway, Bridge—Montgomery County John T. Cunningham, Judge, and Finance Committee receive bids Feb. 6 for \$60,000 4% or 5% \$1000 denom. bonds.

**Tenn., Greeneville**—Water Works—City, N. W. Hawking, Recorder, receives bids until Feb. 11 for \$110,000 \$1000 denom. not to exceed 6% bonds. 1-12

**Tenn., Huntingdon**—Road—Carroll County Court, D. A. Burkhalter, County Judge, will sell, Feb. 1, \$400,000 5% bonds; plans selling \$250,000 bonds later. 11-17

**Tex., Beaumont**—County Tuberculosis Hospital—Jefferson County considering \$75,000 bond issue; B. B. Johnson, Judge. 11-24

**Tex., Beverly Heights**—Texarkana—Town, reported, voted \$150,000 bonds: \$100,000, paving; \$50,000, sewers; plans selling bonds; E. Newt Spivey, Mayor.

**Tex., Brownsville**—Airport—City Commr. plans calling election at earliest possible date on \$100,000 bonds; R. B. Creager, Chmn. Airport Committee. 1-5

**Tex., Corpus Christi**—School—City votes Feb. 11 on \$500,000 5% bonds. Address City Clk.

**Tex., Dallas**—Highway—Dallas County, F. H. Alexander, Judge, votes in Feb. on \$1,300,000 bonds.

**Tex., Fort Worth**—Municipal Improvement—City, O. E. Carr, Mgr., voted \$3,150,000 bonds: \$1,500,000, street improvement; \$1,100,000, extend sanitary sewer system; \$200,000, water works extension; \$350,000, bridge; defeated \$3,350,000 bonds, for municipal auditorium, library, additional park land and revolving street improvement fund, city hall.

**Tex., Houston**—School—City may vote on bonds; H. L. Mills, Bus. Mgr. of Schools.

**Tex., Marshall**—City votes Jan. 31 on \$230,000 bonds: \$150,000, sewer; \$80,000, light. Address City Clk.

**Tex., Memphis**—Road—Hall County, A. C. Hoffman, Judge, defeated \$25,000 Turkey Road Dist. bond issue. 11-10

**Tex., Midland**—Water Works—City, B. Frank Hagg, Mayor, votes Feb. 6 on \$130,000 bonds. 12-1

**Tex., Port Arthur**—Improvement—City, J. P. Logan, Mayor, plans \$500,000 bond issue, paving and asphaltating streets; water works and sewer connections; parks, bridge; also bonds for police station and city jail.

**Tex., Rotan**—School—Rotan Independent School Dist. voted \$25,000 bonds, for debts and improvements. Address Board of Trustees. 1-5

**Tex., San Angelo**—School—City Commr. plans calling election on \$350,000 bonds.

**Va., Portsmouth**—Road, Bridge—Norfolk County Roads and Bridges Comm. considering \$250,000 bond issue; R. B. Preston, County Engr.

**W. Va., Charleston**—School—Cabin Creek Dist., Kanawha County, votes Jan. 31 on \$220,000 bonds; Edward Smith, Sec. Board of Education, Cabin Creek Dist.

**W. Va., Parkersburg**—Road—Wood County Court authorized issuing \$79,500 5%, \$500 and \$1,000 denom. Walker Dist. bonds. 1-5

### Bond Issues Sold

**Ala., Mobile**—Refunding—Mobile County Board of Revenue and Road Commrs. Geo. E. Stone, Treas., sold \$143,000, 4½% bonds to Merchants National Bank, at premium of \$2,522.

**Fla., Fort Pierce**—Inlet—Fort Pierce Inlet Dist., E. L. Price, Chmn., sold \$650,000 6% bonds to Spitzer, Rorick Co., Toledo, Ohio, at 95.36. 11-17

**Fla., St. Augustine**—City, C. G. Oldfather, Auditor-Clk., sold \$199,000 5½% negotiable open coupon notes First Series, 1927, to Stranahan, Harris & Oatis, Inc., Atlantic National Bank Bldg., Jacksonville, Fla., and Todelo, Ohio, at \$199,238. 12-29

**Ky., Earlington**—School Improvement—Board of Education, Ernest Newton, Sec., sold \$30,000 6% bonds to Weil, Roth & Irving Co., Cincinnati, Ohio, at \$32,514 and accrued interest. 4-14-1927

**La., Bastrop**—Road—Morehouse Parish Police Jury, W. A. Page, Sec., sold \$305,000, 5%, \$1,000 denom. Road Dist. No. 1 bonds to Whitney Central Trust & Savings Bank, New Orleans, at par, accrued interest and premium of \$13,375. 1-5

**La., Benton**—School—Bossier Parish School Board, R. V. Kerr, Sec., sold \$80,000 4% \$1,000 denom. Consolidated School Dist. No. 1 bonds to John Nuveen, Chicago, Ill., and Bumps & Co., Detroit, Mich., at par and premium of \$1037. 12-29

**La., Many**—School—Sabine Parish School Board, G. C. Reeves, sold \$100,000 bonds to City Savings Bank & Trust Co., Shreveport. 1-5

**La., Oakdale**—Public Improvement—City, D. C. Green, sold \$80,000 4¾% \$1000 denom. bonds to L. E. French & Co., Alexandria, at par and premium of \$680. 12-29

**La., Shreveport**—School—Caddo Parish School Board, E. W. Jones, Supt., sold \$30,000 Forbigny School Dist. bonds to City Savings Bank & Trust Co. at par, accrued interest and premium of \$667. 12-29

**Md., Baltimore**—Airport—City, Municipal Commrs. of Finance, sold \$1,500,000, 4% coupon bonds to Baltimore Trust Co. and Hambleton & Co., both Baltimore, at 103.18; Wm. F. Broening, Mayor. 1-5

**Miss., Belzoni**—Refunding—Humphreys County Board of Supvrs., A. R. Hutchens, Clk., sold \$98,000 bonds to Citizens Bank & Trust Co., at premium of \$3,200. 12-29

**Miss., Columbus**—City, C. M. Reeves, Sec. Treas., sold \$36,500, 4¾% right of way purchase and depot site bonds to Hibernia Securities Co., New Orleans, at premium of \$365. 12-29

**Miss., Fayette**—Road, Bridge—Jefferson County Board of Supvrs., O. S. Gillis, Clk., sold \$100,000 4¾% bonds to Vandarsall & Co., Toledo, Ohio, at premium of \$2121 and expenses. 12-22

**Miss., New Albany**—School—Board of Supvrs. sold \$13,000 Keownville Consolidated School Dist. bonds to A. K. Tigrett. 12-15

**N. C., High Point**—Street—City, P. P. Pilcher, Mgr., sold \$1,500,000, 4½%, \$1,000

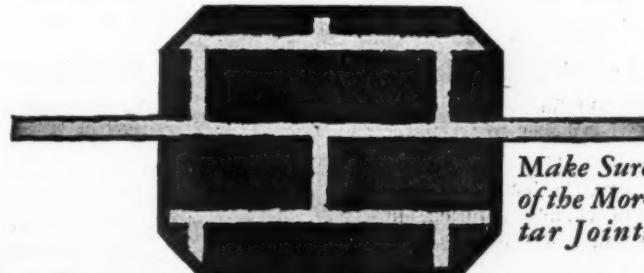
(Continued on page 114)



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## FINANCIAL NEWS

(Continued from page 112)

denom. bonds to Harris, Forbes & Co., New York, Wachovia Bank & Trust Co., High Point and Winston-Salem, at \$1,500,570. 12-15

Oklahoma, McAlester—School—M. J. Hale, Supt. of Schools, sold \$90,000 bonds to Stern Bros. & Co., Kansas City, Mo.; \$27,000 at 4½%, balance at 4½%. 1-5

S. C., Greenville—Sewer—Greater Greenville Sewer Dist., Conn., T. C. Gower, Chmn., sold \$200,000, 4½%, \$1,000 denom. bonds to A. M. Law & Co., Spartanburg, and Harris, Forbes & Co., New York, at \$207,140. 1-5

S. C., Greenwood—Highway—Greenwood County Commrs., E. L. Davis, sold \$250,000, 4½% bonds to W. L. Slayton & Co., Toledo, Ohio, at par, accrued interest and premium of \$3,950. 1-5

Tenn., Johnson City—Refinancing—City Comm. sold \$70,000 bonds to Little, Wooten Co., Jackson, Tenn.; \$150,000, 5¼%; \$20,000, 5%. 1-5

Tex., Arlington—Paving—City sold \$40,000 bonds to Brown-Crummer Co., Wichita, Kansas. 11-17

Tex., Sonora—Sewer—City, W. C. Gilmore, Mayor, sold \$45,000, 5½% \$1000 denom. bonds to Caldwell & Co., Nashville, Tenn., at premium of \$455. 1-5

Tex., Vernon—Courthouse—Wilbarger County, J. V. Townsend, Judge, sold \$375,000 4½% bonds to Garrett & Co., Dallas, at premium of \$4410. 1-12

### Building and Loan Associations

La., Alexandria—Home Building and Loan Assn., capital \$3,000,000, incorporated; R. S. Thornton, Pres.; Irvin McGinnis, V.-P.; W. P. Aerker, Sec.-Treas.

Md., Baltimore—Calvert Square Building & Loan Assn., Inc., 535 Calvert Bldg., incorporated; Albert D. Cover, 4801 Gwynn Oak Ave.; John P. Faherty, Calvert Bldg.; David Kleiman, Tenth and Fleet Sts.

Tex., Beaumont—Gulf Coast Building and Loan Assn., capital \$1,000,000, chartered; E. W. Gross, Pres., 905 Irma St.; J. W. Anderson, V.-P., 896 Washington Blvd.; C. W. Woedmann, Sec.

Tenn., Kerrville—Kerrville Development and Loan Co., Inc., capital and surplus \$215,000, organized; W. A. Fawcett, Pres.; E. Galbraith, V.-P.; J. L. Pampel, Sec.-Treas.

### New Financial Corporations

Fla., Lakeland—American National Bank of Lakeland, capital \$100,000, organized; W. H. Brown, Correspondent, 1030 S. Boulevard Ave.

Ga., Moultrie—Moultrie National Bank, capital \$100,000, chartered; J. Corbett, Pres.; Lewis Edwards, Cashier.

La., New Orleans—Colga Investment Co., Inc., capital \$10,000, chartered; Wm. A. Hoefgen, Pres.; Tom D. Hoskins, Sec.-Treas.

Md., Baltimore—Allied Bankers Corp.,

Court Square, capital \$100,000, incorporated; Robert V. Moon, Jennie D. Becker, Frank F. J. Daily.

Md., Baltimore—F. G. Kitchin Co., Inc., Maryland Trust Bldg., capital \$12,500, incorporated; J. A. Dushane Penniman, J. Edward Atkins, Jr., Joseph N. Hisley.

Miss., Jackson—Guaranty Bond & Mortgage Co., organized; J. B. Marshall, Pres.; J. M. Holman, V.-P., 818 N. Congress St.; Fred L. Nelson, Sec., 109 N. Lemar St.

Mo., St. Louis—Gravois Investment Co., capital \$100,000, chartered; Anthony Collier, 3733 Humphrey St.; Wm. A. Federer, Geo. A. Hall.

S. C., Florence—Fidelity Trust and Mortgage Co. of Florence, capital \$250,000, chartered; J. B. Aiken, Pres.; H. B. McCall, V.-P.; Henry E. Davis, Sec.

Tenn., Johnson City—Goode Investment Co., E. T. and W. N. C. Bldg., organized; Guy L. Smith, Pres.; W. G. Goode, Treas.-Mgr.; Carroll E. King.

Tenn., Nashville—Union Guaranty Trust Co., capital \$500,000, chartered; Joe F. Little, Pres., Southern Insurance Co. Bldg., 128 Eighth Ave., North; Will L. Harris, V.-P.; P. G. Davis, Sec.-Treas., Mountain Grove, Mo.

Tex., Fort Worth—Union Bank & Trust Co., capital \$100,000, incorporated; Dan E. Lydick, Fort Worth Natl. Bank Bldg.

Tex., McAllen—Fidelity Mortgage Co., capital \$12,000, incorporated; Percy and Lucy Herman, A. Nix.

Hood System Industrial Bank, N. Mitchell, Pres., C. E. Hood, Cashier, Winston-Salem, N. C., increased capital \$200,000 to \$500,000.

First National Bank, J. R. Knight, Pres., Fred Stewart, Cashier, Eddy, Tex., acquired Bruceville State Bank, G. E. Kincannon, Pres., Nolan Taylor, Cashier, Bruceville, Tex.

Eight banks in the city of New Orleans reported at the end of the year 1927 aggregate deposits of \$260,000,000 in round figures, this showing an increase for them of over \$15,800,000 during the year. This covers the American Bank and Trust Co., Canal Bank and Trust Co., Hibernia Bank and Trust Co., Interstate Trust and Banking Co., Marine Bank and Trust Co., New Orleans Bank and Trust Co., Whitney-Central Trust and Savings Bank and Whitney-Central National Bank.

The aggregate deposits of the savings banks in Baltimore at the end of 1927 were \$178,660,474, which was an increase of more than \$17,000,000 as compared with the aggregate at the end of 1926. In these aggregates there were 13 banks reporting, the largest deposits in any one bank this year being those in the Savings Bank of Baltimore, which were very nearly \$65,500,000.

Edwin G. Merrill, president, and a number of other officers and trustees of the Bank of New York & Trust Company on January 11 attended the laying of the cornerstone of the new building of that institution now under construction at Wall and William Streets, New York City. The day was the 171st anniversary of the birth of Alexander Hamilton, who founded the bank, and President Merrill and Joseph Andrews, vice-president, laid a memorial wreath on Hamilton's grave in Trinity Churchyard, which is on the west side of Broadway immediately opposite Wall St.

Pittsburgh National Bank, W. L. Garrett, Pres., B. T. Tucker, Cashier, Pittsburg, Tex., purchased assets and acquired First State Bank, K. L. Morris, Pres., A. C. Richardson, Cashier, Leesburg, Tex.

Price, Green & Co., formerly at Gulfport, Miss., have moved their offices to McComb, Miss., and changed name to McComb Mortgage & Bond Co. with Kenneth G. Price, Pres.; F. B. Enochs, V.-P.; Forrest B. Jackson, Sec.-Treas.; doubled capital stock.

Texas State Bank and Trust Co., Henry M. Hefley, Pres., J. L. Clinton, Sec.-Treas., and First National Bank, A. N. Green, Pres. F. B. Cable, Cashier, all Cameron, Tex., merged.

Merchants National Bank, T. W. McCoy, Pres.; John O. Raworth, Cashier, and National People's Savings Bank & Trust Co., R. P. Jones, Pres.; R. A. Geary, Cashier, all Vicksburg, Miss., consolidated as Merchants National Bank & Trust Co., T. W. McCoy, Pres.; R. P. Jones, V.-P.; J. O. Raworth, Cashier.

### \$8,629,000 of Oklahoma City Bonds Sold.

E. M. Fry, city manager of Oklahoma City, wires that E. H. Rollins & Sons, Chicago, purchased 10 issues of Oklahoma City bonds aggregating \$8,629,000. The interest rate will be 4½ per cent and 4 per cent, the bonds to be issued in denominations of \$1000. As previously detailed, proceeds from the sale will be used for important improvements.

### Bids Asked on \$225,000 Pensacola Bond Issue.

Bids will be received about February 15 by the city of Pensacola, Fla., for the purchase of \$225,000 bonds recently voted. Improvements to be undertaken will include betterments to American Legion Park, \$25,000; paving, \$100,000, and sewer extension, \$100,000.

Negotiable coupon notes of \$190,000, bearing an interest rate of 5 per cent, have been sold by the city of St. Augustine, Fla., to the Jacksonville office of Stranahan, Harris & Oatis, Toledo, Ohio, at \$199,238.

### Baltimore Banking House Appoints Clement S. Ucker Southern Representative.

Hambleton & Co., bankers, of Baltimore, announce the association of Clement S. Ucker, former director of development of the Seaboard Air Line Railway system, as Southern representative. Mr. Ucker's long connection with development work throughout the South makes him especially equipped to inaugurate Hambleton & Co.'s determination to become aggressively identified in the Southern field, both as investment bankers and more particularly in connection with financing Southern development. He was for 16 years closely identified with the late S. Davies Warfield, president of the Seaboard Air Line Railway system, in Southern promotional and development work. Upon Mr. Warfield's death he determined to devote his time to the financial field.

Mr. Ucker's headquarters, for the immediate future, will be Baltimore, Md., and Savannah, Ga.

J. T. Cravens, St. Louis, Mo., is reported interested in promotion of 15-story hotel in St. Louis to cost \$1,200,000.

**\$12,000,000**

**First Mortgage 5% Gold Bonds,  
Series due 1968  
Due January 1, 1968  
Price 98 & interest, to yield  
over 5.10%**

**\$5,000,000**

**5½% Convertible Sinking Fund  
Gold Debentures  
Due January 1, 1953  
Price 98½ & interest, to yield  
over 5.60%**

## Lexington Water Power Company

Dated January 1, 1928. In coupon form in interchangeable denominations of \$1,000, \$500 and \$100, registrable as to principal only. First Mortgage Bonds may be fully registered. Interest payable January 1 and July 1 in New York and Chicago without deduction for the normal Federal Income Tax now or hereafter deductible at the source not in excess of 2%.

*Letters from Mr. W. S. Barstow, President, are summarized below:*

**The Company:** Lexington Water Power Company is constructing on the Saluda River about ten miles west of Columbia, South Carolina at an estimated cost of approximately \$21,000,000, a hydro-electric power development which, upon completion about September 1, 1930, will be one of the largest in this country.

The dam will be about a mile and a half long with a maximum height of 208 feet and a maximum width at the base of approximately a quarter of a mile. The lake to be created will be 33 miles long and have a maximum width of 14 miles. The power house will have an original installed capacity of 130,000 Kw. and an ultimate aggregate capacity of 200,000 Kw.

Not only will the dam have the largest cubical content of any dam in this country, but upon completion the lake will be the largest created artificially in the United States. From the standpoint of average firm kilowatt hour output the capacity of the power house will be exceeded by no hydro-electric generating station in America except that of the Niagara Falls Power Company at Niagara Falls.

**Power Contracts:** Contracts for the purchase of power have been executed with Carolina Power & Light Company, Southern Power Company (now assumed by Duke Power Company) and Broad River Power Company extending until July 1, 1980. Under the terms of these contracts, the Company will receive annual revenues of \$1,904,125. After the deduction of estimated operating expenses and taxes, estimated net income available for interest will amount to \$1,420,125. The annual interest requirements on the First Mortgage Bonds amount to \$600,000 and on the Debentures to \$275,000. It is expected that the Company will receive an additional \$150,000 from secondary power sales.

**Security of Bonds:** The First Mortgage 5% Gold Bonds will be secured, in the opinion of counsel, by a first mortgage on all real property of the Company now owned or

hereafter acquired not subject to liens and by a direct mortgage on real property now owned or hereafter acquired subject to liens, if any, existing at the time of acquisition. At the time of the completion of the development, the Mortgage securing these Bonds will be an absolute first mortgage on the power house and dam and on substantially all the other property of the Company. In addition, the above power contracts will be pledged under the Mortgage.

**Provisions of the Debentures:** The 5½% Convertible Sinking Fund Gold Debentures will be a direct obligation of the Company. They will be convertible into \$6 Cumulative Preferred Stock (no par value) of the Company at any time after January 1, 1931, on the basis of 10 shares of such Preferred Stock for each \$1,000 principal amount of Debentures, with adjustment for accrued dividends and accrued interest. A semi-annual sinking fund beginning January 1, 1933, to operate through Halsey, Stuart & Co., Inc., Sinking Fund Agents, is calculated to retire the entire amount of the Debentures by maturity.

**Purpose of Financing:** The proceeds from the sale of these securities will be deposited under separate Agreements to be released in amounts not exceeding an aggregate of 75% of the cost of the development as defined in the Agreements. Not more than \$12,000,000 First Mortgage Bonds and \$5,000,000 Debentures may be issued in connection with the construction of the original 130,000 Kw. capacity of the development.

**Guarantee of Completion:** General Gas & Electric Corporation, which has guaranteed the completion of the original 130,000 Kw. capacity of the development, has no funded debt. Its preferred and common stocks outstanding and listed on the New York Stock Exchange on the basis of prices per share as of the date of the letters have an indicated market value of \$35,864,000, while the indicated market value of all of its outstanding securities including dividend participations is \$39,572,000.

*A descriptive circular will be furnished on request.*

**Halsey, Stuart & Co.  
Incorporated**

**Pynchon & Co.**

**Bonbright & Company  
Spencer Trask & Co.**

These Bonds and Debentures are offered when, as and if issued and accepted by us, subject to the approval of counsel. It is expected that interim receipts of Halsey, Stuart & Co., Inc., or temporary bonds and debentures later exchangeable for definitive bonds and debentures will be ready for delivery on or about January 25, 1928. All statements herein are official or are based on information which we regard as reliable and, while we do not guarantee them, we, ourselves, have relied upon them in the purchase of these securities.

**Banks Merge With \$4,400,000 Resources.**

Ardmore, Okla.—With combined resources of \$4,400,000, the American National Bank of Ardmore acquired the City State Bank here, retaining all officers and employes of the latter except the president, who has retired from business. The City State Bank was organized in 1918.

**Baltimore Sells \$1,500,000 Airport Bonds.**

An issue of \$1,500,000 bonds for the establishment of an airport has been sold by the city of Baltimore to the Baltimore Trust Company and Hambleton & Co., both of Baltimore, at a price of 103.18. The bonds will pay 4 per cent and mature serially from 1933 to 1967.

**New Facilities for Steel and Iron Mills.**

Fairfield, Ala., January 16—[Special.]—The Tennessee Coal, Iron and Railroad Company, Birmingham, announces that two new stands of finishing rolls will be added to the sheet mill here, increasing its capacity by 1000 tons monthly. A continuous reheating furnace will be built at the Fairfield structural mill and an additional row of soaking pits at the Fairfield blooming mill.

**Utilities Company Offers 30,000 Shares.**

Beaumont, Texas.—The Gulf States Utilities Company, under the management of Stone & Webster, Inc., Boston, Mass., is offering 30,000 shares of \$6 dividend preferred stock at 100 and accrued dividend, through Stone & Webster and Blodgett, Inc., Blair & Co., Inc., Chase Securities Corporation and Brown Brothers & Co., all of New York. The company operates electric lighting and power, ice, gas and water utilities in Southern Louisiana and Southeastern Texas.

**65 New Industries for St. Louis in Past Year.**

St. Louis, Mo., January 16—[Special.]—A report by George C. Smith, director of the Industrial Bureau of the Industrial Club of St. Louis, indicates that 65 new industries were established in the St. Louis industrial district in 1927, while 90 existing industries expanded their plants. As a result of the establishment of these industries, it is estimated that 5750 additional employees will be needed.

**Power Company Plans \$5,000,000 Expenditure.**

Chattanooga, Tenn., January 9—[Special.]—In conjunction with the Tennessee Electric Power Company's construction program for 1928 to cost about \$5,000,000, the company announces the resumption of the sale of its first preferred shares at a price of \$100 per share to pay a dividend of \$6 a year. In the past four years the company has annually expended approximately \$5,000,000.

**Kraft Cheese Company Acquires Phenix Corporation**

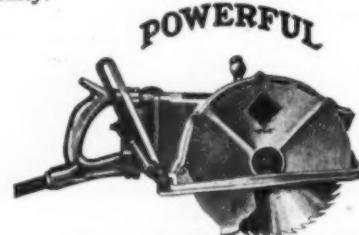
Thomas G. Brennan, advertising manager of the Phenix Cheese Corporation, New York, advises that the business of the corporation has been acquired by the Kraft Cheese Company of Chicago and that the combined business will soon be operated under the name of the Kraft-Phenix Cheese Company, with J. L. Kraft as chairman of the board and Jason F. Whitney, president. The new company owns several Southern plants.

The City of Bessemer, Ala., J. M. Scott, city clerk, has sold \$134,000 of improvement 6 per cent bonds in denominations of \$1000 to Caldwell & Co., Nashville, Tenn., at 104.61.

# ALTA ELECTRIC HAND SAW

*Is blazing a new trail of progress in the field of construction.*

Hundreds of contractors throughout the country have found that this marvel tool effects economies in time and labor costs heretofore considered beyond the realm of possibility.



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LABOR-SAVING TOOLS  
FOR RAILROADS

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Birmingham Atlanta Dallas New York Philadelphia Buffalo Salt Lake City

WILMER BLACK, C. P. A. ROBERT W. BLACK, C. P. A.

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DRILLED ANYWHERE

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That is our aim. We are properly conservative, but we recognize the obligation resting upon all bankers to help meet deserving business requirements.

*We invite your inspection of our modern, burglar-proof and fireproof Safety Deposit Vaults, which may be rented at small cost.*

**BALTIMORE COMMERCIAL BANK**

Gwynn CROWTHER, President

26 South Street, Baltimore, Md.

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WE extend the facilities of our organization to those desiring information or reports on companies with which we are identified.

**Electric Bond and Share Company**

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New York

**MARYLAND TRUST COMPANY**

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**MARX & CO.**

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ALABAMA

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TEXTILE SECURITIES**

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Established 1892

Spartanburg, S. C.

**HAVE YOU BONDS FOR SALE?**

WE BUY ALL CLASSES OF MUNICIPAL BONDS,  
INCLUDING CITY, COUNTY, SCHOOL,  
PAVING, ROAD AND DRAINAGE

**The Hanchett Bond Co. Inc.**

39 SOUTH LA SALLE ST., CHICAGO

**SOLVING YOUR LANDSCAPE PROBLEMS**

The men managing this company—with an experience of more than 25 years—are in a position to render skilled service. Best cultivation, handling, planting and pruning of plants that will greatly enhance the value of your property. We are specialists in planting. Our representative will gladly call at your request.

**THE HOWARD-HICKORY COMPANY**  
Nurserymen—Landscape Gardeners

HICKORY

NORTH CAROLINA



WE ARE GLAD TO ANNOUNCE  
THAT WE HAVE DISPOSED OF OUR INTEREST IN THE  
AMERICAN BANK STATIONERY COMPANY  
AND HAVE ORGANIZED

**THE OSCAR T. SMITH & SON CO.**

WE WILL OCCUPY OUR BUILDING AT

407-9-11 E. SARATOGA STREET

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WHERE WE HAVE INSTALLED A COMPLETE EQUIPMENT FOR

LITHOGRAPHING-STEEL PLATING  
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OUR EFFORTS WILL BE DEVOTED EXCLUSIVELY TO  
MANUFACTURING THE HIGHER GRADES OF  
BANK AND COMMERCIAL STATIONERY

Pursuant to an arrangement with the Company we are offering to holders of the old Preferred Stock of the Company the right to subscribe to this issue share for share, on the same terms as are offered to the public. Only \$2,712,100 of this issue, therefore, is now offered for public subscription.

New Issue

**\$4,500,000**

# Walgreen Co.

(A corporation of Illinois)

## 6½% Cumulative Preferred Stock

Preferred as to assets and dividends and entitled upon any dissolution or liquidation of the Company, whether voluntary or involuntary, to the then redemption price plus accrued dividends, before any payments are made on the common stock. Redeemable in whole or in part at Company's option at any time on not less than 60 days notice at \$115 per share on or before December 31, 1935, the price thereafter decreasing \$1 each year until December 31, 1942, after which date the redemption price is \$107.50 per share; in every case plus accrued dividends thereon to date of redemption.

Dividends payable January, April, July and October 1, from January 1, 1928

The certificates will carry detached warrants entitling the holders thereof to purchase two shares of common stock of the Company for each preferred share purchased, at any time on or before December 31, 1935, at the following basic prices per share: In 1928 or 1929, \$27.50; in 1930 or 1931, \$35; in 1932 or 1933, \$42.50; in 1934 or 1935, \$50; subject to readjustment both as to shares and prices as therein and in the Warrant Agreement provided.

The following information has been furnished by Mr. C. R. Walgreen, President of the Company:

**"HISTORY AND BUSINESS:** The business was started by me in 1902 with a single drug store in Chicago, and the present Company was formed in 1909. Since that time the Company has steadily increased the number of its stores, and the business of the Company has expanded both in total volume and in sales per store, as shown by the following table:

	1920	1924	1926	1927	
Average stores operated.....	19	50	96	135	
Total Sales.....	\$1,550,000	\$5,580,443	\$13,494,878	\$20,000,000	{(December figures preliminary)}

The Company is now the second largest drug store chain in the country, with 170 owned stores and a controlling interest in a further chain of 19 stores. Among the more than twenty cities in which the Company operates are Chicago, St. Louis, New York, Rochester, Minneapolis, St. Paul, Milwaukee, Memphis, Columbus and Louisville. All sales are on a strictly cash basis. Besides its own laboratories for the manufacture of creams, pastes, perfumes and pharmaceuticals, it owns two creameries in Ohio and Illinois, and a large ice cream plant in Chicago.

**EARNINGS:** For the three years and eleven months ended November 30, 1927, net earnings after all charges and taxes, as certified by Messrs. Arthur Andersen & Co., and Messrs. Peat, Marwick, Mitchell & Co., Public Accountants, were as follows:

	1924	1925	1926	1927 (11 mos.)
	\$439,110	\$558,326	\$1,006,206	\$1,394,743

Such earnings for the above period averaged approximately 3 times preferred dividends on this issue of preferred stock; and for the eleven months of 1927 were at the rate of over 5 times such requirements.

**FINANCIAL POSITION:** The balance sheet as at November 30, 1927, as certified by the above mentioned Public Accountants, after giving effect to the present financing, shows current assets of over \$4,600,000 and current liabilities of \$1,300,000, a ratio of over 3½ to 1, and a working capital of over \$3,300,000. Net tangible assets available for the preferred stock amounted to over \$8,300,000.

**PURPOSE:** The proceeds of the sale of this stock will be applied: (1) to the retirement of \$1,787,900 par value preferred stock, (2) to the liquidation of bank and other indebtedness, and (3) as additional working capital.

**CAPITALIZATION:** Upon completion of this financing the capitalization of the Company will be as follows:

	Authorized	Outstanding
6½% Cumulative Preferred Stock, \$100 par, this issue.....	\$4,500,000	\$4,500,000
Common stock, no par value.....	1,000,000 shares*	760,000 shares
* 150,000 shares reserved for issue by the Company for general corporate purposes, and 90,000 shares for issuance under stock purchase warrants.		

The Company will then have no funded or other debt except current liabilities.

Beginning 1931 the Company will set aside annually, and accumulate as a reserve, out of its earned surplus, \$96,750, to be available for the purchase and retirement of the preferred stock at not exceeding 107½. The amended certificate of incorporation contains certain restrictions upon payment of common dividends, the creation of other preferred issues, mortgages, etc., intended to safeguard the interests of the preferred stockholders.

**MANAGEMENT:** The management will remain in the hands of myself and my present associates, who are large holders of the common stock.

Application will be made to list these shares on the New York and Chicago Stock Exchanges."

This stock is offered subject to the approval of counsel. We reserve the right to reject subscriptions in whole or in part, to allot less than the amount applied for and to close the subscription books at any time without notice. Interim receipts or temporary certificates deliverable in the first instance at the office of Hallgarten & Co., 14 Pine Street, New York City.

Price: 108½ and accrued dividend, to yield 6%

Hallgarten & Co.

Merrill, Lynch & Co.

Shields & Co.

Incorporated

The above information is not guaranteed, but is believed to be correct.

# Offering Sound First Mortgage Financing

SOLIDITY and a vast amount of experience characterize our service to the builder or owner of centrally located, income producing business property.

The first mortgage bonds of some of the most successful projects throughout the South, Southwest and West have been underwritten by this Institution.

We also specialize in the refinancing of property already improved, where, in our judgment, it is advantageously

located and has sound revenue producing value.

We are interested in loans from \$50,000 or up, on a basis not exceeding 60% of the appraised value of the ground and building. Conservative in our acceptances, we are likewise conservative in our rates.

Owners and prospective owners of business property in cities having a population over 30,000 are invited to correspond with us regarding their plans for mortgage financing. We can render competent counsel on mortgage matters.

A COMPLETE INVESTMENT

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NATIONAL  
COMPANY**  
INVESTMENT DIVISION  
of the  
FIRST NATIONAL BANK  
BROADWAY-LOCUST-OLIVE  
SAINT LOUIS, MO.

SERVICE

## \$7,000,000 Permit for Group Duke University Buildings.

### \$20,000,000 Available Building Project.

Durham, N. C.—Permits have been issued for the first group of buildings to be erected on the new campus of Duke University at a cost of \$7,000,000. Four structures are included in this unit which is understood to be for the use of the Medical School. A medical building and hospital will cost \$2,400,000, the structure to be practically two buildings under one roof, 7 stories. Others will include a dormitory and union building, the last mentioned to house university activities.

About \$20,000,000 will be available for new buildings in addition to approximately \$4,000,000 expended for 11 new structures on the old campus. Construction will be handled by the Duke Construction Company, with A. C. Lee in charge. Native stone from the University's quarries will be used with Indiana limestone. Horace Trumbauer, Philadelphia, Pa., is the architect.

### Florida and Canadian Refrigeration Laws.

From evidence arising from various sources, indication is strong that the necessity for adequate refrigerating facilities as stimulation for Southern agriculture in all its branches has become recognized, and development of refrigerating plants already is well under way. Over a year ago, the MANUFACTURERS RECORD published a series of articles on refrigeration for the South, and that emphasis on the necessity seems to be bearing fruit.

And it is interesting to note that the strongest advocacy of refrigeration comes from two extreme sections—the Dominion of Canada in the North and the State of Florida in the South. Moreover, their respective plans for practical encouragement for that industry run on almost parallel lines, which may be outlined in informative fashion.

As the foundation for both schemes is government participation—in Canada, in the nature of government subsidy; in Florida, of government cooperation. In both cases, government supervision is made a feature of the law. But, in Canada it is a private industry; in Florida, it is made a public, county industry.

Approved, May 19, 1925, the Florida law may be summarized thus:

1. The County Commissioners in any county, on deciding that a cold storage plant is needed, shall estimate the cost and the returns therefrom and submit the figures to the Commissioners of State Institutions for approval.
2. On such approval, the State shall provide 50 per cent of the cost and the county shall raise 50 per cent by bond issue.
3. On repayment by the country to the State of the State's 50 per cent contribution, the plant shall become the property of the county.
4. The State Marketing Bureau shall cooperate with patrons of a county plant and it shall be the duty of the bureau to assist in marketing the products, to the best advantage, and also to provide facilities therefor.

The Cold Storage law of Canada, enacted in 1907 and amended in 1909, provides, in effect, as follows:

1. The Government may enter into contracts with any persons for the construction and maintenance of public cold storage warehouses, the location, specifications and so on to be approved by the Government.
2. The Government shall provide up to 30 per cent of the cost, payable 15 per cent at the outset, 7 per cent at the end of the first year, 4 per cent at the end of the second year and 2 per cent at the end of each of the two following years.

The Florida law is applicable to "the storing of animal

and vegetable products of the State," and the Canadian law embraces "any food product."

Somewhat more in detail, the Florida law provides that after the opening of such a public refrigerating plant—"open to the public on payment of storage charges and compliance with reasonable rules and regulations"—all moneys realized from operation shall be devoted to operating charges and "the establishment of a sinking fund for the repayment to the State of Florida" of the 50 per cent advanced by the Commonwealth. Only reasonable fees for storage shall be charged and until the State is fully reimbursed these charges shall be regulated by the Commissioners of State Institutions.

"All laws and provisions of law regulating and governing the conduct of warehouses and the issuance and negotiation of warehouse receipts under the laws of Florida shall apply to and govern" all cold storage plants established under this act, "except that in no case shall any section sounding in tort be maintained against any county or this State." All employes shall be named by the County Commissioners, subject to removal by the Commissioners of State Institutions on proof of incompetency or neglect of duty.

Under the Canadian law, "the rates and tolls to be charged for storage in such warehouses shall be subject to the approval of the Governor in Council," who also makes regulations for "the efficient enforcement and operation of this Act."

For some reason, an impression seems to prevail in some quarters that the Florida law provides State Government subsidy. On the contrary, writes Nathan Mayo, Commissioner of Agriculture for Florida, "it is not a subsidy; neither does it allow private parties to be shareholders in the corporation."

No plant, adds Mr. Mayo, has yet been established in Florida under the provisions of the law.

On the other hand, Irving N. Linnell, American Consul General at Ottawa, Canada, writes to the MANUFACTURERS RECORD:

"I have asked the appropriate officers of the Canadian Department of Agriculture whether there have been any Government reports dealing with the operation of this Act, but am informed that no such reports have been made.

"I know, however, that the Act has been put into effect in a number of cases and that the plants built with the assistance of the subsidy are efficient and modern cold storage warehouses. The one operated at Prince Rupert, British Columbia, by the Canadian Fish and Cold Storage Company, Ltd., plays a large part in the freezing, storage and shipment of the halibut catch of the Pacific Northwest."

It would be interesting to know why the Florida law apparently has failed to encourage cold storage in the State, and State government cooperation in marketing.

### New Rosin Standard.

A new standard, effective April 1, 1928, for rosin redder in color than is covered by previous standards has been established by the Department of Agriculture. The new grade is "FF rosin," and applies to rosin which because of the redder color cannot be graded under the other United States standards. The grade shall also be determined by designating it as "gum rosin," or "wood rosin," as the case may be.

### New Company to Make Electric Ranges.

Rome, Ga., January 16—[Special.]—The Rome Electric Range Company has organized here to manufacture electric ranges and the plant will employ about 100 at the start. Directors of the company include C. R. Porter, J. B. Sullivan, H. A. Dean and others.

E. Gordon Perry of Dallas, Texas, is reported to have purchased a site in El Paso, Texas, for a 12-story medical arts building to cost about \$300,000.

### Petition for Baltimore Harbor.

In a petition to Major C. R. Pettis, Federal engineer for the Maryland district, the Association of Commerce of Baltimore asks the following improvements for the port of Baltimore: Dredging of the main harbor and essential subsidiary channels to 40 feet, mean low water, to a width of 1000 feet, and excavation of northeast side of the Fort McHenry channel for an anchorage area three miles long, 4000 feet wide and 35 to 40 feet deep. In an exhaustive survey of the port, the Association of Commerce cites that Baltimore for the last three years has led every Atlantic port, except New York, in shipments by water to the Pacific Coast and in total foreign commerce and in foreign imports; also, in 1926, it led all Atlantic ports, except New York, in foreign exports and total inter-coastal commerce; was second only to New York in 1925 in inbound vessels drawing over 30 feet and in inbound steamers, motor vessels and sailing craft and total movements of barges, scows, etc., and in 1925 led New York in inbound and outbound vessels drawing 26 feet or more.

G. H. Pouder, director of the Export and Import Bureau, says that this survey in behalf of the Association's application for approved channel and anchorage dimensions of the Port of Baltimore represents six months' intensive investigation of the local situation in regard to deep draft navigation and anchorage and contains considerable material which had not before been available.

### Spartanburg's Municipal Airport in Use.

Spartanburg, S. C.—The municipal airport dedicated here a few months ago is now being used as one of the stops on the New York-Atlanta air mail route. It covers about 100 acres and has adequate lighting facilities.

### \$1,000,000 Compress Deal in South Carolina.

Piedmont, S. C., January 14—[Special.]—The Anderson-Clayton Company, Houston, Texas, purchased the Piedmont cotton compress and warehouse, for a reported consideration of more than \$1,000,000, and will operate the property in the name of the Greenville Compress Company. The Anderson-Clayton Company, which owns many round and square gins and large compresses in Oklahoma and Texas, greatly expanded its facilities last year and plans to continue plant additions in 1928.

### Fort Worth Approves \$3,150,000 Bonds.

Fort Worth, Texas.—Voting on projects aggregating \$6,500,000, the city approved four items carrying a total of \$3,150,000 of bonds. These include: Street improvements and storm sewers, \$1,500,000; sanitary sewage facilities, \$1,100,000; extension of water system, \$200,000, and bridge at Lake Worth, \$350,000. Items defeated include auditorium, library, additional park land and revolving street improvement fund.

### Industrial Exposition for Washington, D. C.

The fourth annual industrial exposition of Washington, D. C., is announced for March 12 to 17, inclusive, in the Washington Auditorium, under the auspices of the Washington Chamber of Commerce. Prizes will be given to visitors for articles on exhibits. Dorsey W. Hyde, Jr., is secretary of the Chamber, 315 Homer Building, and John Kirby is assistant secretary.

An issue of \$110,000 5 per cent school bonds has been sold by the Board of Education, Bentonville, Ark., to the First National Bank, Fort Smith, Ark., at par.

**PROPOSALS**

BOND ISSUES      BUILDINGS      PAVING      GOOD ROADS

Bids close February 9, 1928.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., January 12, 1928.—SEALED BIDS will be opened in this office at 3 P. M. February 9, 1928, for extension to mailing vestibule, etc., at the P. O. and Cu. Ho., Montgomery, Ala. Drawings and specifications may be obtained from the custodian of the building or at this office, in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close February 8, 1928.

#### Paving

Macon, Miss., January 7, 1928.  
Notice is hereby given that the City of Macon, Mississippi, will receive bids for the paving of that part of Jefferson Street between the North line of North Street and the South line of Adams Street, to be constructed according to the plans and specifications on file in the office of the City Clerk. The materials to be used to be selected from the following forms of paving: Concrete, Vibrolithic Concrete or either of the following pavements on Concrete Base: Colrock, Warrenite, Bitulithic, Rock Asphalt Cold, Sheet Asphalt, Asphaltic Concrete, Brick. Also each type on crushed rock or gravel base. Approximate quantities: 8625 Square Yards Paving, 750 Lineal Feet Curb and Gutter, 400 Lineal Feet Header, 3000 Cubic Yards Excavation, 1200 Square Feet Sidewalk.

Sealed bids to be received on or before 7.30 P. M. on February 8, 1928. Board reserves the right to reject any or all bids.

Done by order of the Mayor and Board of Aldermen of City of Macon, Miss., this, the 7th day of January, 1928.

MARY B. SCOTT, Clerk.

Bids close February 15, 1928.

#### Creosoted Timber Bridge

Vero Beach, Fla.

Sealed bids will be received at the office of Carter & Damerow, Inc., Consulting Engineers, Vero Beach, Florida, until two (2) o'clock on the 15th day of February, 1928, for the construction of a bridge across the Kissimmee River at Turkey Hammock, Osceola County, Florida.

The principal items of work are approximately as follows:

1950 lineal feet of creosoted timber trestle.  
1—20-foot roadway, steel swing span on concrete center pier. Over-all length approximately 154 feet.

The district reserves the right to award contract to separate bidders, on separate sections of the work and (or) to reject any or all bids.

Each bid must be accompanied by a certified check for five (5%) per cent of the amount of the bid, and the contractor must provide a construction bond for one hundred (100%) per cent of his bid.

Plans, specifications and forms of contract and bond may be examined at the office of Carter & Damerow, Engineers, or sets may be obtained from them by making a deposit of twenty dollars (\$20), ten dollars (\$10) of which will be refunded upon their return within fifteen (15) days following the opening of bids.

BOARD OF BOND TRUSTEES, ATLANTIC-GULF SPECIAL ROAD AND BRIDGE DISTRICT.

By D. C. COX, Chairman.

Attest:

B. T. REDSTONE, Secretary.

Bids close February 1, 1928.

#### Boca Raton Bridge

West Palm Beach, Fla.

Sealed Bids will be received by the Board of County Commissioners, Palm Beach County, Florida, at the Clerk's office up to 2 o'clock P. M. Wednesday, February 1, 1928, for the furnishing of all material, labor, equipment and supplies necessary to construct:

A DOUBLE-LEAF SCHERZER ROLLING LIFT BRIDGE OF THE DECK PLATE GIRDER TYPE, 82 FEET FACE TO FACE OF ABUTMENTS, WITH ONE 20-FOOT ROADWAY AND TWO 5-FOOT SIDEWALKS, ACROSS THE FLORIDA EAST COAST CANAL ON PALMETTO PARK AVENUE, IN BOCA RATON, FLORIDA.

Plans and specifications will be on file in the office of the County Engineer, with proposal blanks, which may be purchased for Ten Dollars (\$10), which will not be refunded. Plans and specifications may be examined in the office of the County Engineer free of charge, but, unless purchased, they will not be allowed to leave the office.

Each bid must be accompanied by a Certified Check, made payable to the Chairman of the Board of County Commissioners, Palm Beach County, Florida, in the amount of five (5%) per cent of the bid.

The Board reserves the right to reject any or all bids.

By order of the Board of County Commissioners, Palm Beach County, Florida.

THEO. M. O'NEAL, Chairman.

Attest:

FRED E. FENNO, Clerk.

JAKE BOYD, County Engineer.

## PROPOSALS

Bids close January 25, 1928.

### Street Improvements

Perry, Georgia.

Sealed proposals will be received by the Mayor and Aldermen of the City of Perry, at the office of the Mayor, at Perry, Georgia, until 4 o'clock P. M. January 25, 1928, and then opened publicly and read, for furnishing all labor, materials, equipment and other things necessary for storm drainage and paving Macon Street from the southern end of the present pavement of said Macon Street to the intersection of Macon Street with Carroll Street and Carroll Street from said intersection to a point 97.9 feet East of the center of the Central of Georgia Railroad line crossing said street, a total distance of 1914.25 feet.

Proposals will be received only on ONE-COURSE CONCRETE for street paving and TWO-COURSE CONCRETE for sidewalk paving.

The following quantities give a general idea of the work to be done:

3800 Sq. Yds. Street Pavement.  
200 Lin. Feet Concrete Curbing.  
4000 Bricks, Catch Basins and Manholes.  
1800 Lbs. Cast-Iron, Catch Basins and Manholes.  
1175 Sq. Yds. Sidewalk.  
150 Sq. Yds. Driveway Entrances.  
255 Lin. Ft. 18-inch Concrete Pipe.  
120 Lin. Ft. 15-inch Concrete Pipe.

Each proposal must be submitted on the regular forms accompanying the specifications and accompanied by a certified check, made payable to the City of Perry, or bidder's bond for five per cent (5%) of the price bid.

Plans and specifications are on file at the office of S. P. Crowell, City Clerk, at Perry, Georgia, and copies of the specifications may be obtained from Charles S. Vance, City Engineer, at Perry, upon the payment of Five Dollars (\$5.00) as payment therefor, not to be refunded.

An acceptable surety bond for one hundred per cent (100%) of the contract price will be required, together with a five (5) year maintenance bond for twenty-five per cent (25%) of the contract cost will be required.

The city reserves the right to reject any or all bids, to waive any informalities or irregularities in the bids received and to accept any bid which is deemed most favorable to the City of Perry, Georgia, at the time and under the conditions stipulated.

**MAYOR AND ALDERMEN OF THE CITY OF PERRY, GEORGIA.**

CHARLES S. VANCE,  
City Engineer.

Bids close February 10, 1928.

### Water-Works

DeKalb, Miss.

SEALED proposals will be received by the Mayor and Board of Aldermen of Town of DeKalb, Mississippi, on or before 2 P. M. February 10, 1928, for divisions of work embraced in this contract as follows:

Div. 1—Furnishing cast-iron water main and fittings.

Div. 2—Furnishing steel water pipe and fittings.

Div. 3—Furnishing valves, boxes and hydrants.

Div. 4—Constructing water lines.

Div. 5—Installing connection around plant.

Div. 6—For constructing 50,000-gallon concrete reservoir.

Div. 7—Constructing brick pumping station.

Div. 8—Constructing all concrete foundation work.

Div. 9—For furnishing and installing elevated steel tower and tank.

Div. 10—For furnishing and installing complete all pumping machinery and equipment.

Div. 11—For sinking one or more tubular wells and installing therein necessary pumping equipment.

Div. 11A—For building spring wells, necessary gravity line and 20,000-gallon collecting basin.

Div. 12—For furnishing house service material.

Specification form of proposals, contracts and plans may be seen at the office of Town Clerk, DeKalb, Mississippi, or can be secured from Mr. Henry A. Mentz, Hammond, La., upon receipt of \$10.

Bids close January 24, 1928.

### Sewer System

Irvine, Ky.

Sealed bids will be received by the undersigned on January 24, 1928, till 7 P. M. for construction of Sanitary Sewer System, City of Irvine, Ky., approximating 90,000 feet. Tax of \$1.00 per foot against abutting property, ten-year bond plan; remaining cost by city available.

JOHN A. WALLACE, Mayor.

Further particulars write  
J. R. WHITE, Clerk.

Bids close January 31, 1928.

### Water-Works Improvements

Jonesboro, La.

The Mayor and Board of Aldermen of the Town of Jonesboro, Louisiana, will receive bids at the Town Hall until 10 o'clock A. M. January 31, 1928, for material and labor necessary in the building of the Water-works Improvements.

Approximately the following equipment and material will be required:

One (1) Fire Pump.  
One (1) 50,000-gallon steel tank and tower.  
One (1) 125,000-gallon concrete reservoir.  
3,800 feet of 8-inch Cast-Iron Pipe.  
3,000 feet of 6-inch Cast-Iron Pipe.  
17,700 feet of 4-inch Cast-Iron Pipe.  
5,000 feet of 2-inch Cast-Iron Pipe or Steel Pipe.

Sundry Hydrants, Valves, Fittings, etc.

Labor laying pipe and general construction.

Plans and specifications will be on file at the office of the Town Clerk, Jonesboro, Louisiana, and at the office of the Engineers. All bids must be submitted on blanks for the purpose furnished with the specifications.

Plans and specifications, with bid sheet, can be obtained from the ENGINEERS, SWANSON-McGRAW, INC., 426 Balter Building, New Orleans, La., by depositing Ten Dollars (\$10), which amount is not refundable.

Each bid must be accompanied by a certified check (Bidder's Bond not acceptable) in amount of five per cent (5%) of the gross amount bid, but in no event shall check be in less amount than Fifty Dollars (\$50) as evidence of good faith.

The right is reserved to reject any or all bids, waive any or all formalities, or accept any bid or bids which in the opinion of the Board appear to be to the best interest of the town.

W. A. HART, Mayor.

L. E. POOLE, Clerk.

SWANSON-McGRAW, INC.,

Consulting Engineers,  
426 Balter Building.  
New Orleans, La.

Bids close January 26, 1928.

### Water Main Construction

Durham, N. C.

Sealed proposals will be received by the City Manager of the City of Durham, N. C., in the Council Chamber of the City Hall until 11 o'clock A. M. on Thursday, the twenty-sixth day of January, 1928, for the construction of a Twenty-four inch cast-iron force main from the Flat River Steam Plant to the City Filtration Plant.

The work will embrace furnishing and laying approximately ten miles of twenty-four inch A. W. W. A. Standard cast-iron pipe, with the necessary fittings and valves.

Separate tenders will be received for furnishing materials and for construction.

Plans and specifications are on file with the City Clerk and blank forms of proposals, specifications, etc., may be obtained from the Engineer without charge.

Consideration will be given only to bids of contractors who submit evidence showing that they are licensed under "An Act to Regulate the Practice of General Contracting," ratified by the General Assembly of North Carolina on March 10, 1925.

Certified check for five (5%) per cent of the amount bid for such items for which a

### Manufacturers Record

proposal is made must accompany all proposals.

Bids will be opened in the presence of those interested, but the Council reserves the right to reject any or all bids.

By order of Council.

R. W. RIGSBY, City Manager.

C. B. ALSTON, City Clerk.

WILLIAM M. PIATT.

Durham, N. C.

Bids close February 20, 1928.

### Women's Ward Building

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control at its office in Charleston, West Virginia, until 2 P. M. Monday, February 20, 1928, for doing all work and furnishing all materials necessary to complete a Women's Ward Building, State Hospital for Colored Insane, at Lakin, Mason County, West Virginia, as described below, according to the plans and specifications prepared by Theodore T. Sansbury, Architect, Parkersburg, W. Va.

The building is to be 201 ft. 10 in. x 45 ft. 8 in., with four projecting bays, each 30 ft. 4 in. x 14 ft. 10 in., and an entrance porch 15 ft. 1 in. x 38 ft. 0 in., three stories, with basement. Fireproof construction, except front porch, which is of wood and structural steel.

Plans and specifications and blank form for bids will be mailed by the State Board of Control when request for plans is accompanied with check for \$25. WHICH AMOUNT WILL BE REFUNDED ONLY ON RECEIPT OF BONA-FIDE BID AND CERTIFIED CHECK ON OR BEFORE TIME NAMED ABOVE.

STATE BOARD OF CONTROL.

J. S. LAKIN, President.

Charleston, Kanawha County, W. Va.

Bids close February 1, 1928.

### Drainage Pumping Plant

Clarksdale, Miss.

Sealed bids will be received by the Board of Levee Commissioners for the Yazoo-Mississippi Delta at its office in Clarksdale, Mississippi, until 2 P. M. Wednesday, February 1, 1928, for the construction of a drainage pumping plant, at which time and place the said bids will be publicly opened. Bids will be received on both oil-engine-driven and electric motor-driven equipment. Oil engines must be of the full Diesel type and of vertical construction. Electric motors shall be of the synchronous type. The pumping equipment shall consist of one motor-driven or oil-engine-driven pump, with a capacity of 50,000 gallons per minute against a static head of 16 feet (16').

Bids will be considered covering the entire work contemplated under the specifications, but separate bids will be considered on the pumping plant building, foundations and suction pit as a complete unit, and on pumps with either motor or oil-engine drive, together with all suction and discharge piping, vacuum pump, motor generator set, wiring and switchboard and oil storage tanks, all completely installed and ready for operation as a complete unit. No bid will be considered that does not cover either the construction of the entire job complete in every particular, or the furnishing and installation of the equipment complete in every particular, or the construction of the building, pumping pit and foundations complete in every particular.

A certified check equal to ten per cent (10%) of the bid must be furnished in connection with each bid, which check must be drawn on some solvent bank or trust company in the Yazoo-Mississippi Delta Levee District, State of Mississippi.

Plans and specifications are now on file in the office of the Levee Board, Clarksdale, Mississippi, and a copy may be obtained from W. L. Head, Chief Engineer for the Yazoo-Mississippi Delta Levee District, at Clarksdale, Miss., or copy of plans and specifications may be seen in the office of F. G. Prout, Associate Engineer, 374 Randolph Building, Memphis, Tennessee. A charge of \$10 will be made for each set of plans and specifications furnished to bidders.

The Board of Levee Commissioners reserves the right to reject any or all bids.

J. W. CUTRER, President.

G. O. ROBINSON, Secretary.

Board of Levee Commissioners of the Yazoo-Mississippi Delta,

Clarksdale, Miss.

**Complete Town**

**WANTED**—Contractor to build a complete town; over 3500 acres of land, 4 trunk-line railroads. For full particulars write  
 J. D. STONE,  
 P. O. Box 438, Norfolk, Va.

Bids close February 9, 1928.

**Electric Light and Office Fixtures**

Lafayette, La., December 31, 1927.

The Police Jury for the Parish of Lafayette, Louisiana, will receive and open sealed bids for the electric-light fixtures and office furnishings and fixtures for the new courthouse at 10 o'clock in the morning at a meeting to be held in the Police Jury Room of the old courthouse at Lafayette, Louisiana, on Thursday, February 9, 1928. Plans and specifications therefor may be obtained from William T. Nolan, Architect, Suite 1048 Canal Bank Building, New Orleans, La.

Right reserved to reject any and all bids.

J. J. FOURNET,  
 President Police Jury.  
 GEORGE CROUCHET,  
 Secretary Police Jury.

Bids close February 1, 1928.

**Fire Alarm Equipment**

Huntington, W. Va.

Sealed proposals, in duplicate, addressed to the City Clerk of Huntington, West Virginia, will be received by the City Clerk at his office until 12 o'clock noon on February 1, 1928, for Fire Alarm Central Office and Engine House Equipment and Fire Alarm Boxes, and the necessary aerial line and underground construction.

Copies of specifications and plans can be obtained from the City Clerk at Huntington, West Virginia.

Bidders must follow the city's plans and specifications and submit bids in accordance therewith, but may submit in addition thereto a separate proposal based on either overhead or underground construction, planned to fill the requirements necessary to operate the same number of alarm boxes, and at the same locations as designated in the city's specifications, such proposal to be accompanied by maps, drawings, etc., showing routes, circuits and manner of box installation.

Each bid must be accompanied by a certified check on a National Bank, made payable to the City of Huntington, West Virginia, in the sum of ten per cent of the total bid submitted.

The successful bidder will be required to file a satisfactory surety bond in the amount of the contract price, and comply with provisions of the City Charter respecting contracts and bonds.

The city reserves the right to reject any or all bids.

H. H. FIELDER, City Clerk.

Bids close February 15, 1928.

**Furniture and Equipment for Court Rooms and Special Rooms**

DADE COUNTY COURTHOUSE AND MIAMI CITY HALL

Miami, Fla.

Sealed proposals will be received on or before 12 o'clock noon, Eastern time, February 15, 1928, at the office of the County Commissioners of Dade County, Miami, Florida, for the following work and under the following rules and conditions:

The building in which this work is to be installed is being erected on the present property of the county, located in the City of Miami, Fla., bounded by West Flagler Street on the south, Northwest Miami Court on the east, Northwest First Street on the north and Northeast First Avenue on the west.

Bids will be received upon the following work, as more specifically shown and specified by the plans and specifications herein mentioned:

**Furniture and Equipment for Court Rooms and Special Rooms.**

Plans and specifications for the above, together with bid blanks, can be secured from A. Ten Eyck Brown, Architect, and August Geiger, Associate Architect, Nos. 1007-8 Huntington Building, Miami, Fla., or 717-20 Forsyth Building, Atlanta, Ga., upon the deposit of a certified check for \$10 for any of the above work separately. This check will be retained until the return of the plans and specifications in complete shape to the Architects' office.

All bids to be considered must be received on or before 12 noon, Eastern time, February 15, 1928, and must be submitted on blanks to be furnished by the Architects, covering each and every contract and other formal items as called for by the specifications.

Each bid to be considered must also be accompanied by a certified check for 2% of the total amount, payable to Mr. Hugh Peters, Chairman, Board of County Commissioners, Dade County, Florida, as agreed liquidated damages in case the low bidder fails to sign a contract or make a proper bond.

The form of contract to be used will be that of the American Institute of Architects, 3rd Edition, 1918, as approved by the National Association of Builders, and as modified by the Attorneys for the Dade County Commissioners. The form of bond will be that included in the above standard contract document of the American Institute of Architects, or a form prepared by the Attorneys for Dade County Commissioners.

All bids should be addressed to Mr. Hugh Peters, Chairman, Board of County Commissioners, Dade County, Miami, Florida,

with the contents of each bid plainly marked on its cover.

The Board of County Commissioners of Dade County, Florida, will have the right to reject any or all bids.

(Signed) HUGH PETERS, Chairman,  
 Board of County Commissioners,  
 Dade County, Florida.

Attest:  
 W. E. NORTON,  
 Deputy Clerk.

Bids close January 24, 1928.

**Notice to Diamond Drill Contractors**

Asheville, N. C.

Sealed bids will be received until 12 o'clock M. January 24, 1928, and publicly opened by the governing body of the City of Asheville, N. C., in the Council Chamber of the governing body of the City of Asheville, for furnishing all labor, tools, machinery, equipment, material and everything incident, necessary and required for the drilling of approximately 1800 feet of diamond drill test holes at the Pink Beds Dam Site.

All necessary information may be secured upon application at the office of the Howerton Engineering Company, New Medical Building, Asheville, N. C.

A certified check equaling 10% of the bid must accompany each proposal as evidence of good faith and as a guarantee that, if awarded the contract, the bidder will execute a construction bond in the sum of 50% of the amount bid, in form as required, with a satisfactory corporation as surety. The certified check is to be forfeited in the event the bidder fails to execute such satisfactory bond within ten days from the date of the award. The governing body of said city shall be the sole judge of the bonds it will accept.

The City of Asheville reserves the right to reject any and all bids or to accept the bid most advantageous to said city.

No bids will be considered except those meeting all the terms and conditions of this advertisement, and all terms and conditions of any plans, specifications or requirements that may be furnished by the Engineers, and, in addition thereto, the same must be submitted by firms thoroughly experienced in this line of work and have adequate equipment and satisfactory financial rating.

The proposals of contractors who are not licensed to do business in the State of North Carolina, as required by law, will not be considered.

(Signed) J. B. SEAY, Purchasing Agent,  
 CITY OF ASHEVILLE.

Engineers:  
 HOWERTON ENGINEERING CO.,  
 Asheville, N. C.

**PROPOSALS**

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

**MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES****MINERAL PROPERTIES**

Kaolin, feldspar, mica, asbestos, cynite, corundum, garnet, gold and other metallic minerals. If interested in the above minerals write me.

W. B. McGuIRE, Franklin, N. C.

**TWO GOLDEN OPPORTUNITIES**—Each comprises Townsite and Industrial values in the Spotlight of Southern developments. Monte Erie is an exceptionally accessible 5 square mile area of Mountains and Minerals, Forests and Fields. Waters and priceless, picturesquely scenic beauty, 25 miles north of Birmingham. Del Fuego is a Spanish grant on the L. & N. R. R., 10 miles west of Bay St. Louis, Miss.; 43 miles east of New Orleans. It seems to be a monopoly of Gulf Coast Ceramic Clays. I have owned them 20 and 37 years. Ask for Booklet description. OWNER, Box 24, Warrior, Alabama.

**RATES AND CONDITIONS**

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost allow seven words of ordinary length to a line. When the advertisement contains a number of long words proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamp accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c per line; 300 lines, 26c per line; 500 lines or more, 25c per line.

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TIMBERLAND CRUISING and values given anywhere. Also operating plans furnished. Advice as to yearly growth in value of young timber. Many years' practical experience.

W. J. McGOVERN, Timber Cruiser,  
 Clearfield, Pa.

**FARM, FRUIT AND TRUCK LANDS****FLORIDA**

IT'S FREE—IN FLORIDA  
 The finest year 'round climate in the world—U. S. Weather Bureau. The Playground of the Rich; the Paradise of the Poor. Send today for 1928 list of Homes, Groves, Farms and Investments. Tampa-West Coast Realty Co. (Inc.), Opposite Post-office "Since Before the War," Tampa, Fla.

**FARM, FRUIT AND TRUCK LANDS****FLORIDA****FLORIDA THE MECCA  
OF THE INVESTOR**

Since the general slump in real estate throughout the country during the last two years Florida is fast showing a revival and return to normal conditions. The pessimists are no longer able to spread pessimism and telling around that "Florida has been shot to pieces," but instead people are beginning to rise above present conditions. Florida has had the courage to build and develop in advance of present needs and will expand as everywhere else where energy and enterprise are put forth.

Many Northern capitalists are taking advantage of present temporary depressed conditions and are investing their money in Florida acreage and citrus groves. These shrewd business men have absolute faith in Florida's great future, industrially, agriculturally and from a tourist and immigration point of view, and are investing for colonization purposes at price levels they know will never be reached again.

This is buying time. Here is a list of good things to buy:

4800 acres good land in Polk County near railroad; good roads and towns. Distress price \$4.50 per acre. Title perfect.

2500 acres, wonderful soil, near Lakeland. Big bargain at \$32 per acre on easy terms.

3000 acres, perfect land, ideal for colonization, short distance from Lakeland, must be sold. Price \$52 per acre on easy terms.

5760 acres ideal citrus land in Hernando County. Part in young grove, part cleared ready to plant; good buildings and part cut-over high pine land. Price from \$50, \$100 to \$150 per acre. Attractive terms.

27,000 acres rich land in Manatee and Hardee Counties. A dandy colonization tract. Lowest possible price \$12.50 per acre. Will sell 7000 or 20,000 if desired.

23,000 acres truck and fruit land in Lake County at \$17.50 per acre; railroad and near good towns and roads.

83,000 acres general farming land in Dixie County. Cheap at \$7.50 per acre.

10-acre, 10-year-old grove in Polk County, good producer; to settle estate will sell for \$9000 on terms.

20-acre, 9-year-old grapefruit grove, good producer, Polk County. Must sell; price \$12,500.

30-acre producing grove on lake near Lakeland; home with modern improvements. Must sell; price down to \$37,500; terms.

18-acre grove and homesite near large lake, good town, paved road. Trees 7 years old and bearing. Wonderful bargain at \$13,000.

60 acres, with 50 acres in grove; big crop fruit, fine home, lake, paved roads. Bargain at \$60,000.

430-acre income grove in Polk County; trees 6 to 30 years old, private packing house on spur of S. A. L. railroad; implement houses, caretakers' houses, 3 modern dwellings, all conveniences. Owner must sell owing to failing health. Wonderful opportunity for big grove man. Price and terms on application.

Above listed properties can be delivered. For particulars write or wire

E. J. KAUFMANN, Realtor,  
P. O. Box 15, Lakeland, Florida.

**NORTH CAROLINA****If interested**

**FOR HOME OR FOR INVESTMENT**  
In the great and rapidly developing  
**STATE OF NORTH CAROLINA**,  
especially in its leading city, Charlotte, or  
in a Southern Cotton Mill or Southern Mill  
Stocks, write to

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**RIO GRANDE VALLEY HOME**—25 acres, well located, good modern improvements, citrus orchard. Price \$20,000.  
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**FARM, FRUIT AND TRUCK LANDS****TEXAS****"TEXAS 'WINTER GARDEN'  
LANDS."**

A subdivision in 20-40 acre tracts, cleared and irrigated; suitable for Citrus Fruits, Winter Vegetables, Staple Crops. Reasonable prices. INVESTIGATE our proposition TODAY.

**BERMUDA LANDS COMPANY**, Realtors,  
501-4 Houston Building,  
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WE REPRESENT a syndicate who owns and controls over 1,500,000 acres of rich chocolate loam soil, 200,000 acres in the winter garden irrigated district, South Texas, where many opportunities are waiting for colonizers and investors; prices average \$25 acre. Thousands acres are and are being developed; now is the time to investigate.

**ACME REALTY COMPANY**,  
211 West Craig, San Antonio, Texas.

**BUSINESS OPPORTUNITIES**

WRITE TO L. WUESTE, P. O. Box 183, Eagle Pass, Texas, for information on the biggest gravity irrigation project in the State; unusual possibilities.

**SELL OR LEASE** plant and machinery. Space additional manufacturing. Bagging-Ties, Batts Cottonwaste. Low labor cost. Spartanburg, S. C. Spartanburg Bagging and Waste Co.

**WANTED**—A practical printer, with money, to invest in an established, well-equipped plant in one of the best industrial towns in the Shenandoah Valley. Address No. 6849, care Manufacturers Record, Baltimore, Md.

**FOR SALE**—Half or whole interest in a well-equipped sand and gravel proposition, Philadelphia Road at the city limits, Baltimore, Md.; 32 acres, with abundance of as good material as there is in the State, with lake supplying abundance of water. Railroad running through property.

H. L. THOMAS,  
1821 Eutaw Place, Baltimore, Md.

**FOR SALE**—The only exclusive men's furnishing store in Eagle Pass, Texas, a growing city, with tributary business territory containing quarter million people and more to come, for it is getting ready to put in the biggest gravity irrigation project in the State. Will take \$18,000 to handle. Write for full information to L. WUESTE, P. O. Box 183, Eagle Pass, Texas.

**CITY AND SUBURBAN PROPERTY****DESIRABLE FLORIDA PROPERTY**

For Quick Sale—at Reasonable Price famous Ormond-Daytona Beach, running back 2900 feet to the Halifax River, located two miles north of the Ormond Beach Hotel (owned and operated by the Florida East Coast Railroad) and the winter residence of Mr. John D. Rockefeller. For quick sale I offer a portion of this land for cash at a price way below its present value.

It is an ideal location for a large private estate or for a high-class residential development.

For particulars please address  
WALTER L. THURSTON,  
P. O. Box 1, Ormond Beach, Florida.

**BUSINESS AND INVESTMENT PROPERTIES****BILOXI, MISSISSIPPI.****FOR SALE OR LEASE.**

200x400 feet, 700 feet west of Edgewater Gulf Hotel. Full Riparian Rights. Seawall and paved road in front. Short distance from Golf Course and Railroad Station. Wonderful location for apartment or hotel building. Terms reasonable.

W. E. STEWART, M. D.,  
402 Tribune Building,  
Terre Haute, Ind.

**BUSINESS AND INVESTMENT PROPERTIES**

**FOR SALE**—Very desirable business property, returning over a thousand dollars a year; never been vacant and never will be; low taxes. Price \$10,000. L. WUESTE, P. O. Box 183, Eagle Pass, Texas.

**INDUSTRIES WANTED**

**WANTED**—A Paper Mill or Wood Products Company to locate here. Plenty willow timber, cheap electric power, good railroad and other inducements.

DR. H. L. COCKERHAM,  
Gunnison, Miss.

**INDUSTRIAL PLANTS**

**FOR SALE CHEAP**—Flour, Corn and Feed Mill in best agricultural section of Georgia.

J. W. WOOLFOLK, Fort Valley, Ga.

**FACTORY SITES**

**FOR SALE**—360 acres, situated 8 miles from business center of Atlanta; about 3000 feet railroad frontage; suitable for large industries and their village sites. Taxes are exempt for 5 years on new industrial plants. CRAIG COFIELD, Oakland, Florida.

**FOR SALE OR LEASE** Brick building, 63x73, two-story, situated on 1.4 acres of ground near Belt Line Railroad, property owned by the city. Offered for small factory site; reasonable terms for either sale or lease to reliable parties. Apply to FRANK C. HANRAHAN, City Manager, Portsmouth, Va.

**TAMPA, FLORIDA**—the logical distributing point. **HARRIS TERMINALS**—fully equipped with railroad tracks on both the Seaboard and Atlantic Coast Line railroads. We solicit your inquiries for **WAREHOUSE** and **FACTORY** sites. Prices and terms reasonable. **HARRIS REALTY CO.**, Realtors, 105 W. Cass St., P. O. Box 585, Tampa, Florida.

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**WE COLLECT** Accounts, Notes, Claims anywhere in U. S. and Canada. No charges unless collected. Es. 25 years; bank ref. May's Collection Agency, Somerset, Ky.

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EDWARD L. BIOSSAT,  
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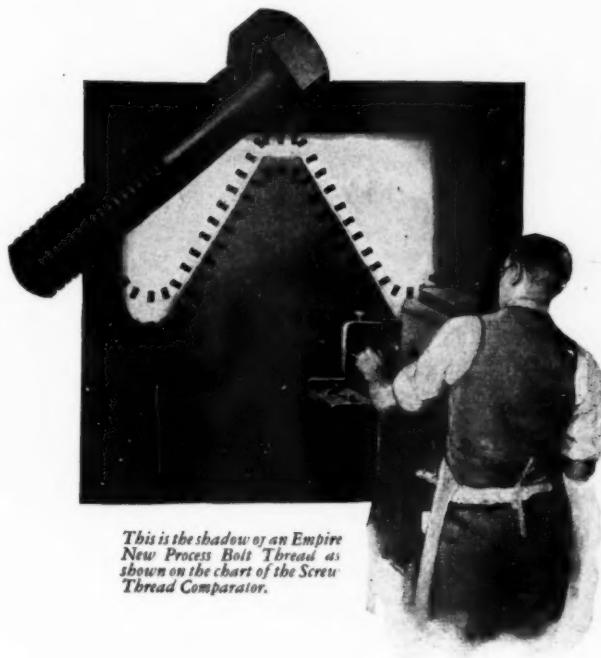
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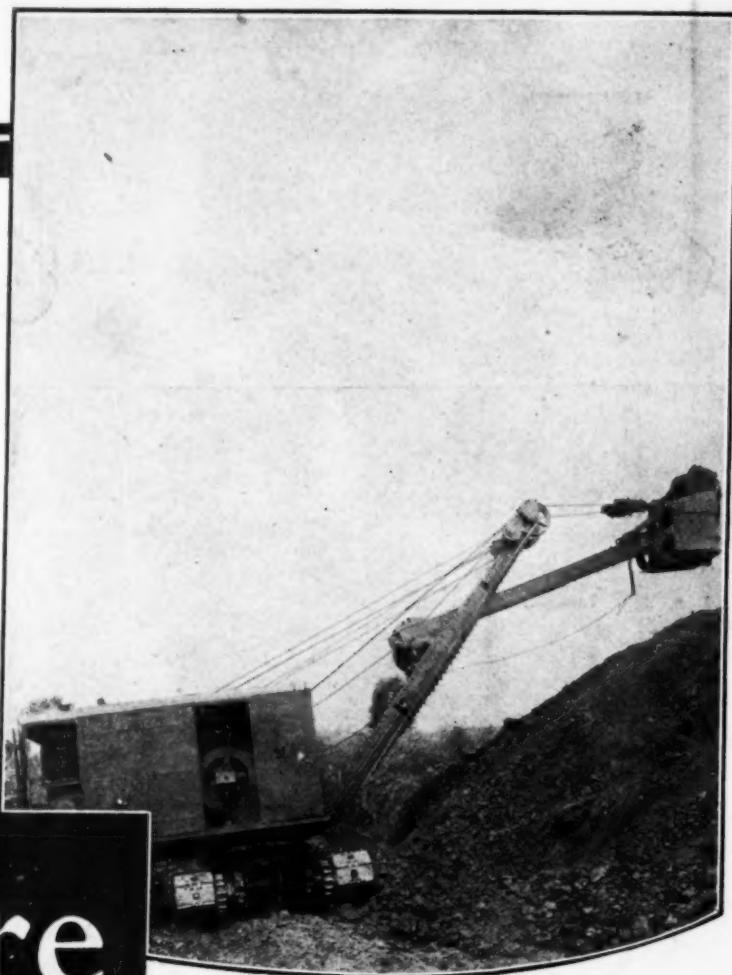
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